

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: P316601

Luminaire Tested: **GLEON-SA7B-827-U-5MQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P316601  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA7B-827-U-5MQ  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31215 lumens  
Efficiency: N/A  
Efficacy: 105.8 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G3

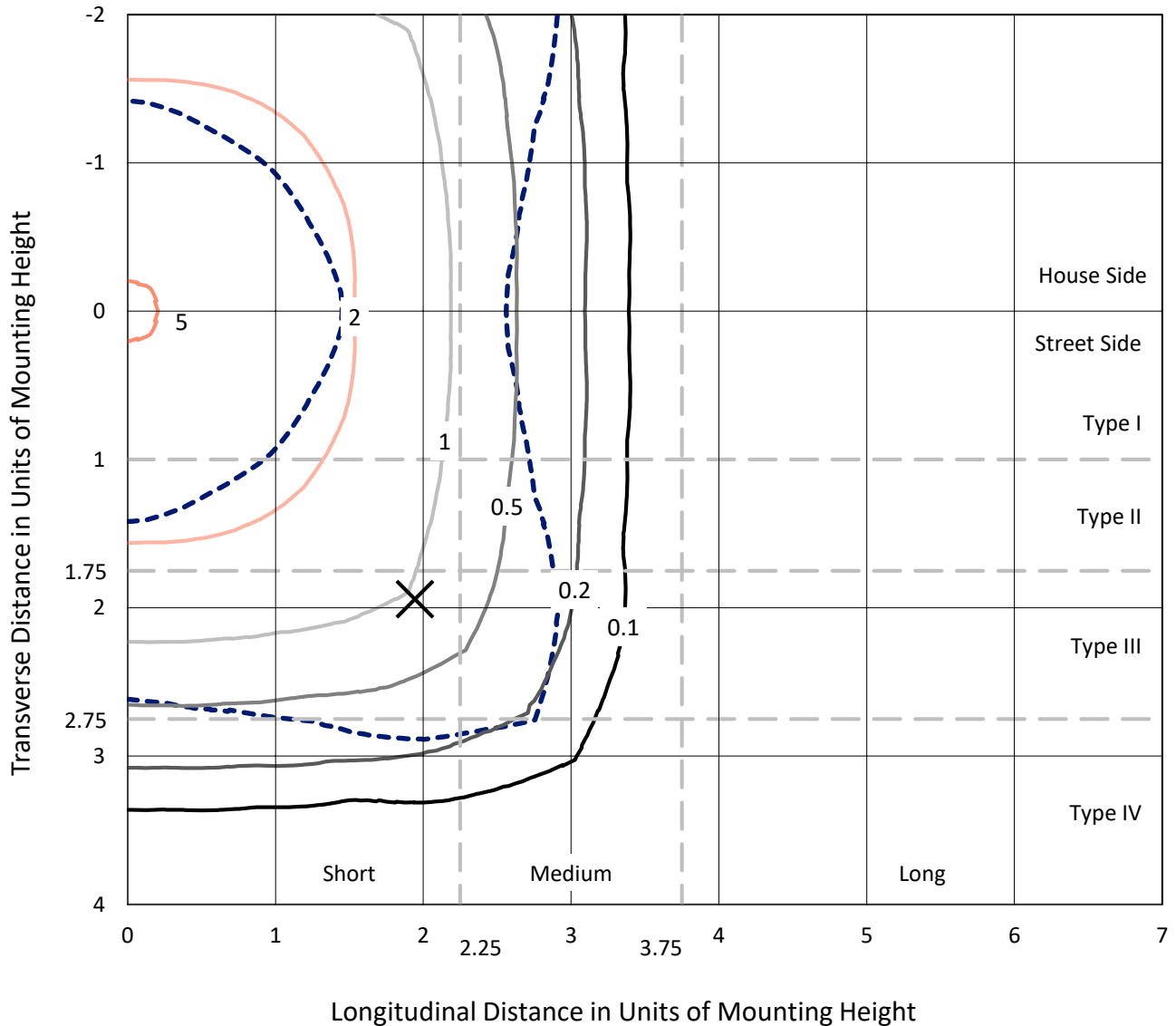
Input Watts (W): 295  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

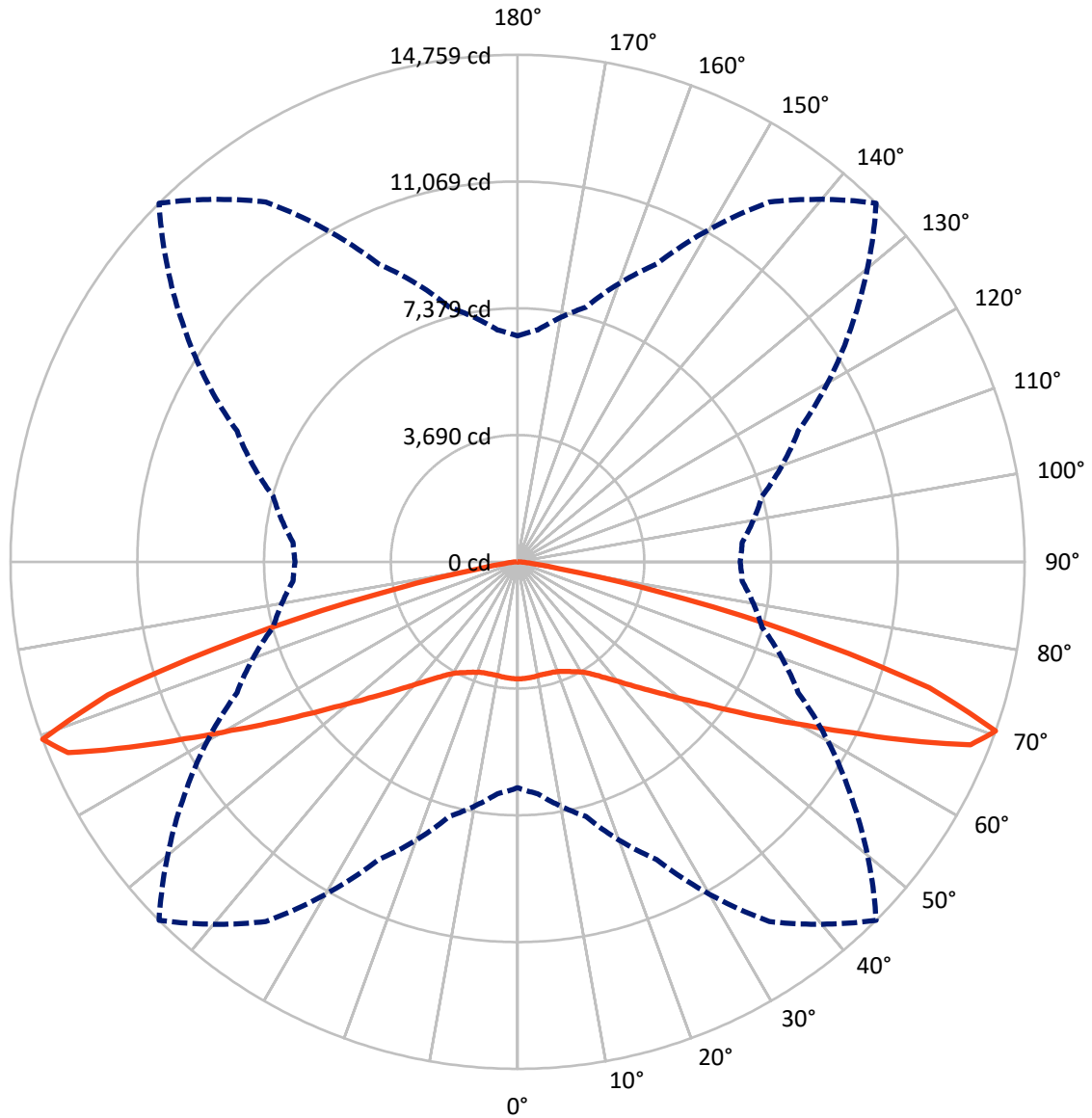
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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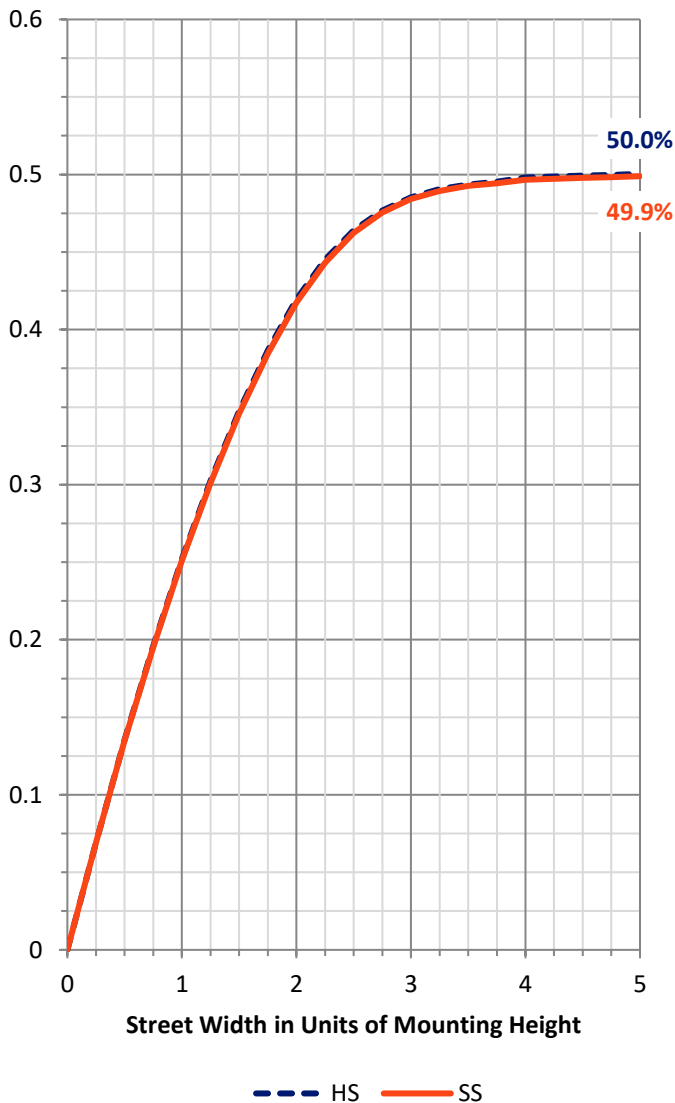
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 15607.5  | 0.0    | 15607.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 15607.5  | 0.0    | 15607.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 31215.0  | 0.0    | 31215.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 322.9   | 1.0       |
| 10°-20°   | 947.9   | 3.0       |
| 20°-30°   | 1613.6  | 5.2       |
| 30°-40°   | 2559.2  | 8.2       |
| 40°-50°   | 4164.6  | 13.3      |
| 50°-60°   | 6866.7  | 22.0      |
| 60°-70°   | 10080.5 | 32.3      |
| 70°-80°   | 4457.6  | 14.3      |
| 80°-90°   | 201.9   | 0.6       |
| 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°    | 31215.0 | 100.0     |
| 0°-180°   | 31215.0 | 100.0     |



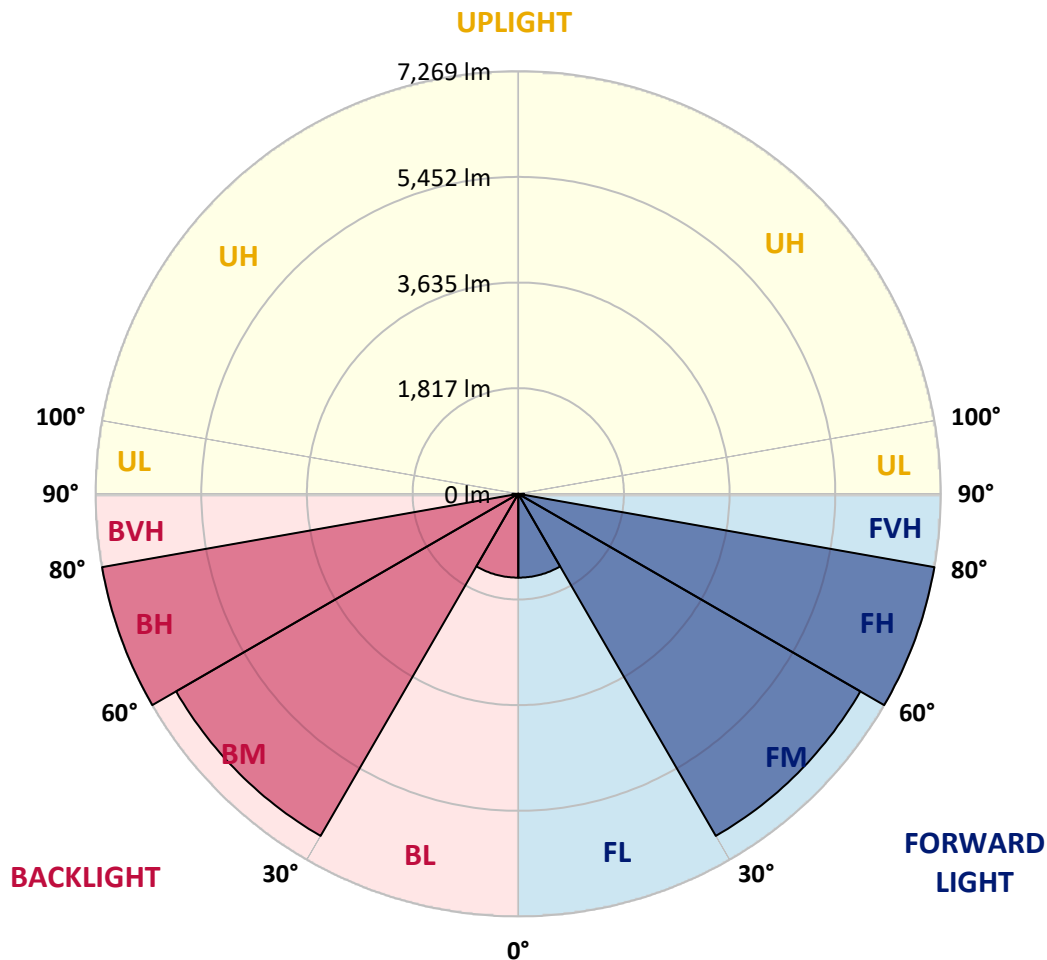
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1442.2 | 4.6       |                         |      |         |
| FM (30°-60°)   | 6795.3 | 21.8      |                         |      |         |
| FH (60°-80°)   | 7269.1 | 23.3      |                         |      | G3/7500 |
| FVH (80°-90°)  | 100.9  | 0.3       |                         |      | G2/225  |
| BL (0°-30°)    | 1442.2 | 4.6       | B3/2500                 |      |         |
| BM (30°-60°)   | 6795.3 | 21.8      | B4/8500                 |      |         |
| BH (60°-80°)   | 7269.1 | 23.3      | B5                      |      | G3/7500 |
| BVH (80°-90°)  | 100.9  | 0.3       |                         |      | G2/225  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B5-U0-G3**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°    | 85°    | 90°    |
|-------|--------|--------|---------|---------|---------|---------|---------|---------|--------|--------|--------|
| 0°    | 3409.2 | 3409.2 | 3409.2  | 3409.2  | 3409.2  | 3409.2  | 3409.2  | 3409.2  | 3409.2 | 3409.2 | 3409.2 |
| 2.5°  | 3404.0 | 3400.9 | 3408.1  | 3407.1  | 3400.9  | 3401.9  | 3401.9  | 3405.0  | 3405.0 | 3403.0 | 3403.0 |
| 5°    | 3391.6 | 3389.5 | 3397.8  | 3397.8  | 3391.6  | 3393.7  | 3395.7  | 3398.8  | 3397.8 | 3395.7 | 3394.7 |
| 7.5°  | 3376.1 | 3375.1 | 3383.3  | 3383.3  | 3379.2  | 3381.3  | 3379.2  | 3380.2  | 3378.2 | 3376.1 | 3373.0 |
| 10°   | 3350.3 | 3352.3 | 3359.6  | 3361.6  | 3361.6  | 3362.7  | 3360.6  | 3355.4  | 3352.3 | 3349.2 | 3346.1 |
| 12.5° | 3326.5 | 3325.5 | 3335.8  | 3341.0  | 3349.2  | 3358.5  | 3352.3  | 3337.9  | 3331.7 | 3325.5 | 3323.4 |
| 15°   | 3311.0 | 3312.1 | 3322.4  | 3331.7  | 3346.1  | 3365.8  | 3358.5  | 3335.8  | 3323.4 | 3316.2 | 3314.1 |
| 17.5° | 3307.9 | 3310.0 | 3323.4  | 3339.9  | 3355.4  | 3377.1  | 3373.0  | 3350.3  | 3329.6 | 3316.2 | 3313.1 |
| 20°   | 3315.2 | 3316.2 | 3336.8  | 3360.6  | 3387.5  | 3408.1  | 3398.8  | 3374.0  | 3346.1 | 3325.5 | 3320.3 |
| 22.5° | 3328.6 | 3332.7 | 3358.5  | 3395.7  | 3437.1  | 3465.0  | 3453.6  | 3411.2  | 3367.8 | 3342.0 | 3334.8 |
| 25°   | 3370.9 | 3372.0 | 3407.1  | 3457.7  | 3507.3  | 3539.3  | 3525.9  | 3466.0  | 3410.2 | 3381.3 | 3372.0 |
| 27.5° | 3458.8 | 3461.9 | 3497.0  | 3555.9  | 3598.2  | 3618.9  | 3610.6  | 3562.1  | 3514.5 | 3483.5 | 3486.6 |
| 30°   | 3585.8 | 3590.0 | 3629.2  | 3694.3  | 3720.1  | 3725.3  | 3723.2  | 3700.5  | 3657.1 | 3615.8 | 3618.9 |
| 32.5° | 3740.8 | 3742.8 | 3795.5  | 3854.4  | 3875.1  | 3879.2  | 3875.1  | 3854.4  | 3802.8 | 3747.0 | 3750.1 |
| 35°   | 3940.2 | 3946.4 | 3997.0  | 4053.8  | 4070.3  | 4078.6  | 4071.4  | 4044.5  | 3990.8 | 3936.0 | 3934.0 |
| 37.5° | 4186.0 | 4187.1 | 4239.8  | 4298.6  | 4319.3  | 4321.4  | 4313.1  | 4295.5  | 4228.4 | 4178.8 | 4175.7 |
| 40°   | 4471.2 | 4475.3 | 4537.3  | 4600.3  | 4608.6  | 4599.3  | 4610.6  | 4600.3  | 4531.1 | 4474.3 | 4483.6 |
| 42.5° | 4818.3 | 4827.6 | 4902.0  | 4963.9  | 4940.2  | 4935.0  | 4942.3  | 4945.4  | 4889.6 | 4820.4 | 4814.2 |
| 45°   | 5222.2 | 5230.5 | 5323.5  | 5373.0  | 5357.6  | 5323.5  | 5337.9  | 5362.7  | 5285.2 | 5199.5 | 5207.8 |
| 47.5° | 5683.0 | 5703.6 | 5802.8  | 5849.3  | 5811.1  | 5764.6  | 5792.5  | 5829.7  | 5738.8 | 5632.4 | 5627.2 |
| 50°   | 6195.4 | 6221.2 | 6353.4  | 6418.5  | 6380.3  | 6294.6  | 6341.0  | 6365.8  | 6234.6 | 6097.2 | 6085.9 |
| 52.5° | 6741.9 | 6767.7 | 6934.0  | 7068.3  | 7043.5  | 6910.3  | 6975.4  | 6949.5  | 6798.7 | 6613.8 | 6599.3 |
| 55°   | 7360.7 | 7371.0 | 7550.8  | 7767.7  | 7792.5  | 7694.4  | 7690.2  | 7647.9  | 7424.7 | 7210.9 | 7200.6 |
| 57.5° | 7997.1 | 8004.3 | 8236.7  | 8493.0  | 8609.7  | 8609.7  | 8494.0  | 8404.1  | 8107.6 | 7859.7 | 7833.8 |
| 60°   | 8684.1 | 8709.9 | 8967.1  | 9315.3  | 9588.0  | 9668.6  | 9464.0  | 9219.2  | 8896.9 | 8594.2 | 8564.2 |
| 62.5° | 9295.7 | 9325.6 | 9719.2  | 10237.8 | 10675.8 | 10969.2 | 10469.2 | 10070.5 | 9483.7 | 8998.1 | 8941.3 |
| 65°   | 9373.1 | 9453.7 | 10027.1 | 10966.1 | 11946.5 | 12532.3 | 11573.6 | 10591.1 | 9521.9 | 8847.3 | 8789.4 |
| 67.5° | 8560.1 | 8696.5 | 9471.3  | 10933.1 | 12959.0 | 14216.2 | 12279.2 | 10293.6 | 8835.9 | 8090.0 | 8026.0 |
| 70°   | 6577.6 | 6776.0 | 7669.6  | 9563.2  | 12784.4 | 14758.6 | 11837.0 | 9011.6  | 7366.9 | 6564.2 | 6474.3 |
| 72.5° | 3608.5 | 3690.2 | 4493.9  | 6548.7  | 10249.2 | 12541.6 | 9873.1  | 6663.4  | 4885.4 | 3975.3 | 3824.5 |
| 75°   | 1144.7 | 1173.6 | 1582.7  | 2679.8  | 5797.6  | 8307.0  | 6271.8  | 3270.7  | 1800.7 | 1327.5 | 1312.0 |
| 77.5° | 508.3  | 511.4  | 572.3   | 782.0   | 1996.9  | 4208.8  | 2398.8  | 890.5   | 613.6  | 536.2  | 553.7  |
| 80°   | 321.3  | 321.3  | 354.3   | 387.4   | 543.4   | 1222.1  | 648.8   | 423.6   | 361.6  | 335.8  | 343.0  |
| 82.5° | 153.9  | 170.5  | 230.4   | 247.9   | 298.6   | 411.2   | 332.7   | 276.9   | 241.7  | 179.8  | 167.4  |
| 85°   | 101.2  | 84.7   | 145.7   | 164.3   | 173.6   | 197.3   | 193.2   | 182.9   | 158.1  | 89.9   | 100.2  |
| 87.5° | 45.5   | 43.4   | 75.4    | 69.2    | 65.1    | 49.6    | 74.4    | 91.9    | 88.8   | 44.4   | 44.4   |
| 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)