

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: P316302

Luminaire Tested: **GLEON-SA8D-827-U-5WQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P316302  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA8D-827-U-5WQ  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 48150 lumens  
Efficiency: N/A  
Efficacy: 94.2 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G5

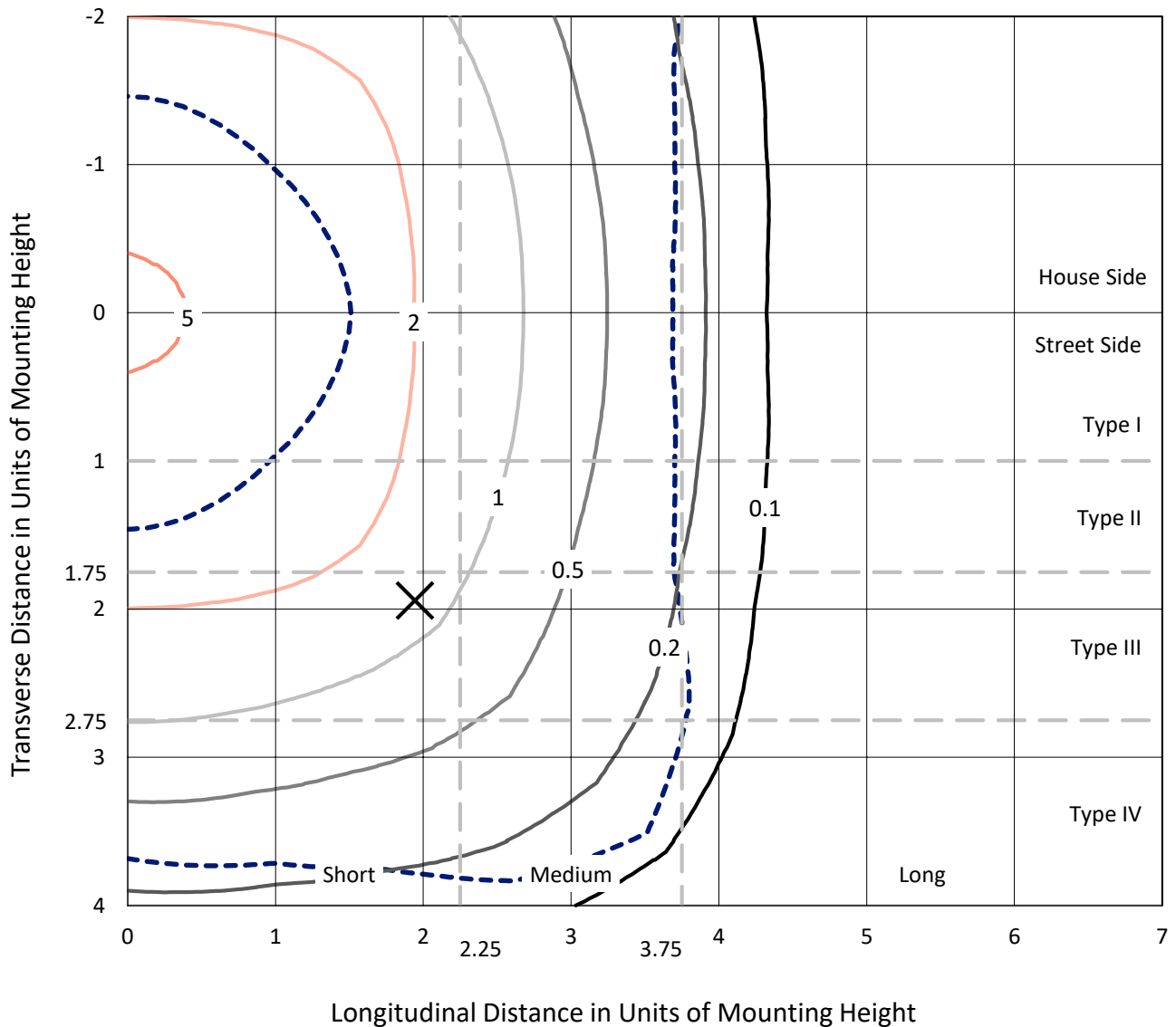
Input Watts (W): 511  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

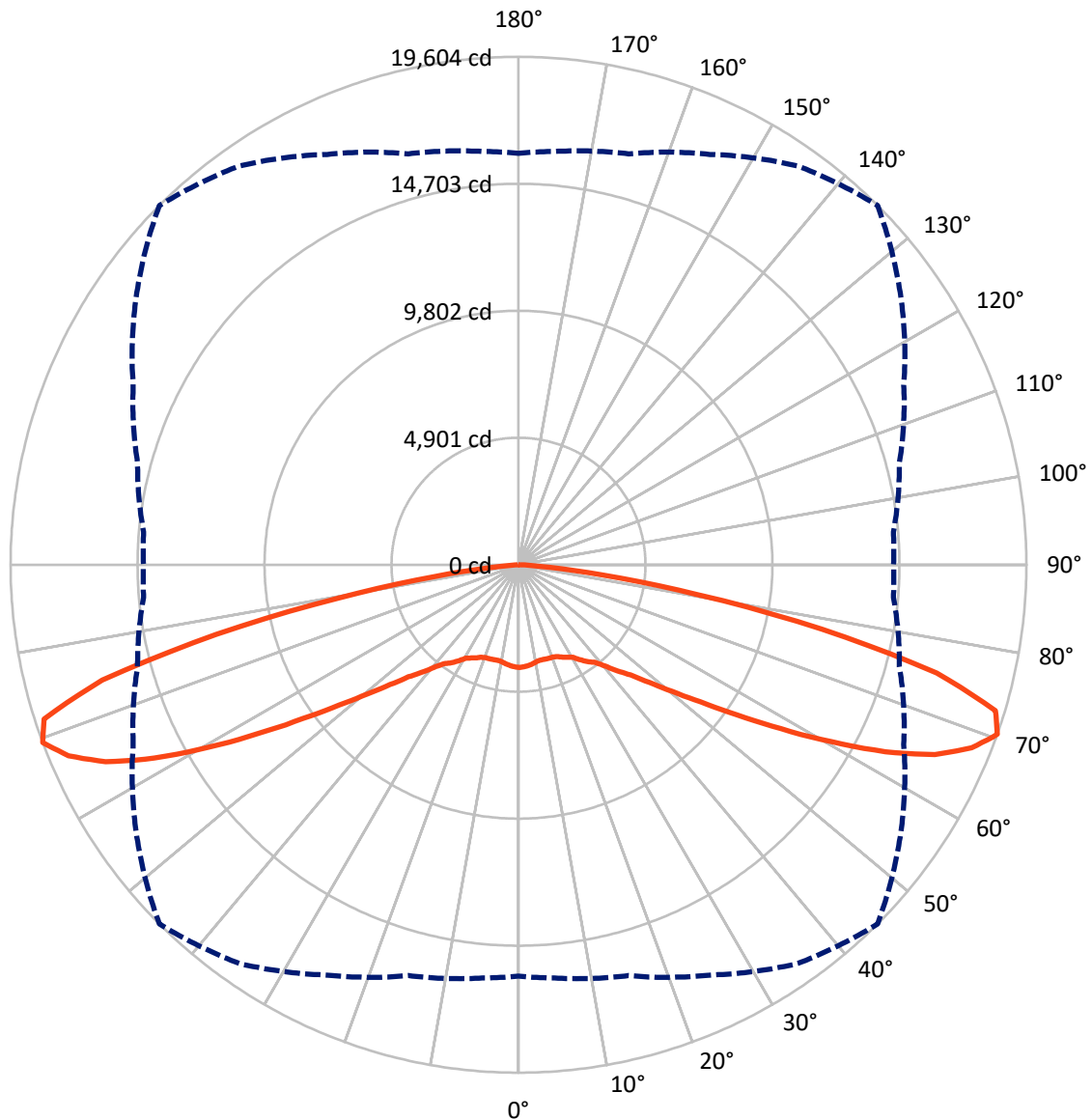
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 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 70-Deg Vertical

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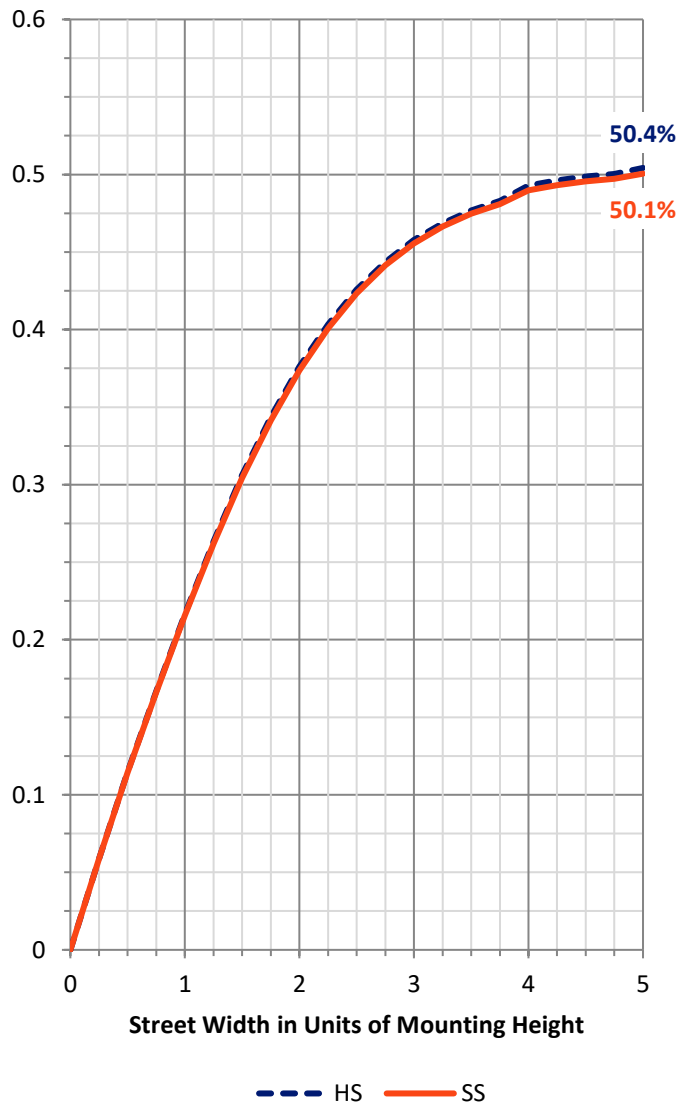
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 24075.0  | 0.0    | 24075.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 24075.0  | 0.0    | 24075.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 48150.0  | 0.0    | 48150.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 369.9   | 0.8       |
| 10°-20°   | 1080.4  | 2.2       |
| 20°-30°   | 1842.0  | 3.8       |
| 30°-40°   | 2878.2  | 6.0       |
| 40°-50°   | 4877.8  | 10.1      |
| 50°-60°   | 8895.1  | 18.5      |
| 60°-70°   | 15313.5 | 31.8      |
| 70°-80°   | 12003.3 | 24.9      |
| 80°-90°   | 890.0   | 1.8       |
| 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°    | 48150.0 | 100.0     |
| 0°-180°   | 48150.0 | 100.0     |

**Coefficient of Utilization**



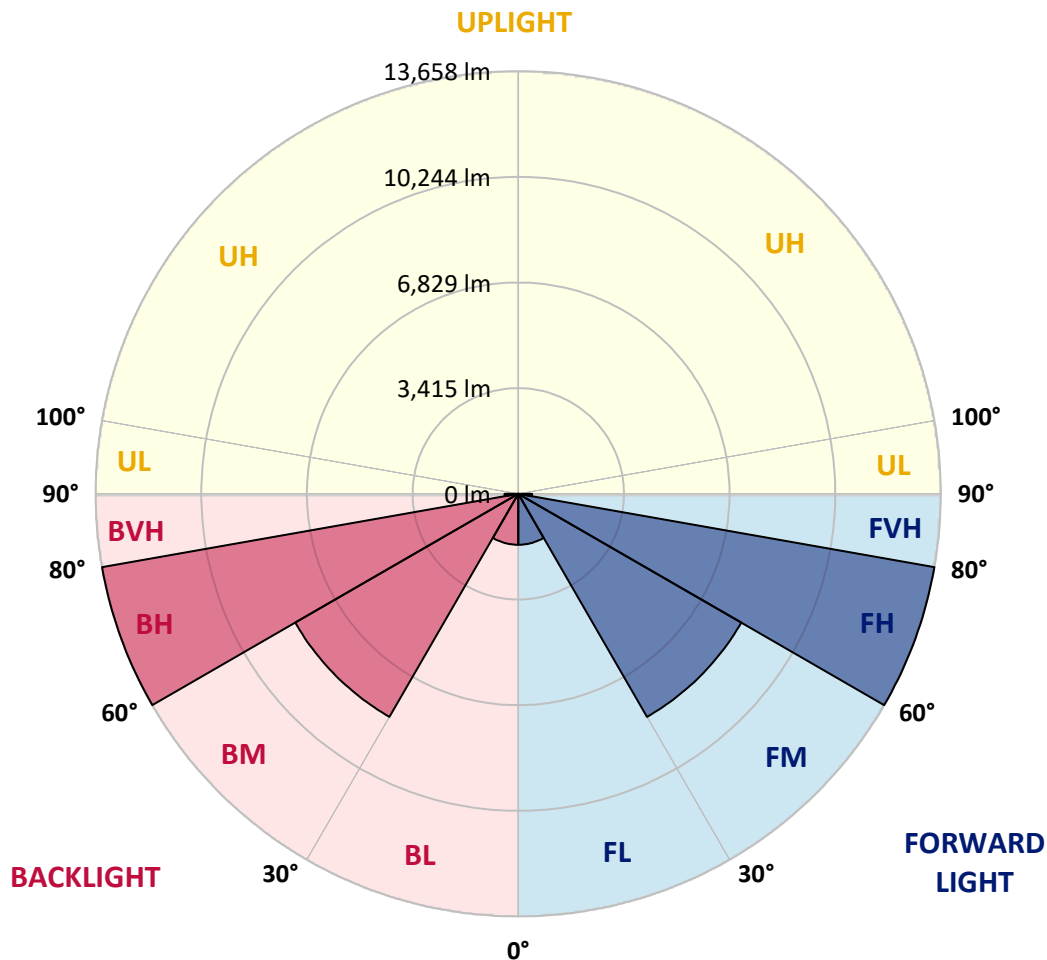
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |        |
|----------------|---------|-----------|-------------------------|------|--------|
|                |         |           | B                       | U    | G      |
| FL (0°-30°)    | 1646.1  | 3.4       |                         |      |        |
| FM (30°-60°)   | 8325.5  | 17.3      |                         |      |        |
| FH (60°-80°)   | 13658.4 | 28.4      |                         |      | G5     |
| FVH (80°-90°)  | 445.0   | 0.9       |                         |      | G3/500 |
| BL (0°-30°)    | 1646.1  | 3.4       | B3/2500                 |      |        |
| BM (30°-60°)   | 8325.5  | 17.3      | B4/8500                 |      |        |
| BH (60°-80°)   | 13658.4 | 28.4      | B5                      |      | G5     |
| BVH (80°-90°)  | 445.0   | 0.9       |                         |      | G3/500 |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |        |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |        |

**BUG Rating: B5-U0-G5**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     | 90°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3962.8  | 3962.8  | 3962.8  | 3962.8  | 3962.8  | 3962.8  | 3962.8  | 3962.8  | 3962.8  | 3962.8  | 3962.8  |
| 2.5°  | 3945.2  | 3950.0  | 3945.2  | 3948.4  | 3940.5  | 3943.6  | 3943.6  | 3943.6  | 3942.0  | 3943.6  | 3940.5  |
| 5°    | 3910.2  | 3913.4  | 3907.0  | 3910.2  | 3905.4  | 3910.2  | 3911.8  | 3910.2  | 3907.0  | 3908.6  | 3902.2  |
| 7.5°  | 3857.6  | 3860.8  | 3856.0  | 3860.8  | 3854.4  | 3862.4  | 3860.8  | 3856.0  | 3851.3  | 3851.3  | 3844.9  |
| 10°   | 3829.0  | 3830.6  | 3817.8  | 3813.0  | 3798.7  | 3801.9  | 3806.7  | 3811.4  | 3816.2  | 3825.8  | 3824.2  |
| 12.5° | 3830.6  | 3830.6  | 3811.4  | 3790.7  | 3770.0  | 3774.8  | 3782.8  | 3800.3  | 3819.4  | 3836.9  | 3838.5  |
| 15°   | 3846.5  | 3844.9  | 3816.2  | 3782.8  | 3768.4  | 3782.8  | 3787.5  | 3798.7  | 3829.0  | 3859.2  | 3860.8  |
| 17.5° | 3857.6  | 3857.6  | 3813.0  | 3774.8  | 3773.2  | 3795.5  | 3793.9  | 3798.7  | 3832.1  | 3876.7  | 3878.3  |
| 20°   | 3878.3  | 3878.3  | 3821.0  | 3779.6  | 3779.6  | 3803.5  | 3805.1  | 3813.0  | 3846.5  | 3895.9  | 3903.8  |
| 22.5° | 3924.5  | 3926.1  | 3865.6  | 3832.1  | 3835.3  | 3849.7  | 3854.4  | 3867.2  | 3897.4  | 3951.6  | 3961.2  |
| 25°   | 3989.8  | 3993.0  | 3930.9  | 3911.8  | 3922.9  | 3950.0  | 3946.8  | 3956.4  | 3989.8  | 4042.4  | 4051.9  |
| 27.5° | 4080.6  | 4072.7  | 4015.3  | 4007.3  | 4018.5  | 4037.6  | 4036.0  | 4037.6  | 4064.7  | 4112.5  | 4123.6  |
| 30°   | 4198.5  | 4195.3  | 4153.9  | 4158.7  | 4153.9  | 4147.5  | 4149.1  | 4161.8  | 4176.2  | 4214.4  | 4225.6  |
| 32.5° | 4313.2  | 4316.3  | 4290.9  | 4314.7  | 4349.8  | 4373.7  | 4337.0  | 4302.0  | 4286.1  | 4306.8  | 4316.3  |
| 35°   | 4520.2  | 4528.2  | 4488.4  | 4472.4  | 4520.2  | 4590.3  | 4486.8  | 4429.4  | 4461.3  | 4488.4  | 4496.3  |
| 37.5° | 4872.2  | 4877.0  | 4810.1  | 4746.4  | 4711.3  | 4778.2  | 4674.7  | 4679.5  | 4791.0  | 4841.9  | 4840.4  |
| 40°   | 5273.6  | 5275.2  | 5230.6  | 5174.8  | 5114.3  | 5130.2  | 5088.8  | 5101.6  | 5174.8  | 5221.0  | 5233.8  |
| 42.5° | 5751.4  | 5746.6  | 5676.5  | 5596.9  | 5579.4  | 5595.3  | 5525.2  | 5515.7  | 5600.1  | 5682.9  | 5684.5  |
| 45°   | 6371.0  | 6359.8  | 6269.0  | 6181.4  | 6097.0  | 6062.0  | 6044.5  | 6090.7  | 6206.9  | 6283.4  | 6285.0  |
| 47.5° | 7038.3  | 7008.1  | 6960.3  | 6890.2  | 6817.0  | 6781.9  | 6753.2  | 6775.5  | 6860.0  | 6890.2  | 6893.4  |
| 50°   | 7724.8  | 7731.2  | 7740.7  | 7713.7  | 7686.6  | 7675.4  | 7600.6  | 7557.6  | 7583.1  | 7527.3  | 7519.4  |
| 52.5° | 8538.7  | 8551.5  | 8643.8  | 8721.9  | 8768.1  | 8792.0  | 8650.2  | 8502.1  | 8419.3  | 8310.9  | 8279.1  |
| 55°   | 9499.1  | 9519.8  | 9655.2  | 9871.8  | 10094.8 | 10212.7 | 9956.3  | 9679.1  | 9422.7  | 9220.4  | 9155.1  |
| 57.5° | 10569.5 | 10606.1 | 10792.4 | 11208.2 | 11665.3 | 11944.0 | 11510.8 | 11007.5 | 10512.1 | 10220.6 | 10169.7 |
| 60°   | 11824.5 | 11859.6 | 12117.6 | 12713.3 | 13453.9 | 13872.8 | 13216.6 | 12393.2 | 11776.8 | 11498.0 | 11404.1 |
| 62.5° | 13318.5 | 13321.7 | 13638.7 | 14334.7 | 15312.7 | 15895.6 | 15006.9 | 13906.3 | 13270.8 | 12934.7 | 12843.9 |
| 65°   | 14925.6 | 14933.6 | 15261.7 | 16013.5 | 17024.9 | 17658.8 | 16655.3 | 15508.6 | 14731.3 | 14236.0 | 14165.9 |
| 67.5° | 16061.2 | 16094.7 | 16440.3 | 17345.0 | 18291.1 | 18862.9 | 17824.4 | 16527.9 | 15629.6 | 15038.7 | 14979.8 |
| 70°   | 15879.7 | 16010.3 | 16416.4 | 17472.4 | 18788.0 | 19603.5 | 18014.0 | 16406.9 | 15221.9 | 14524.2 | 14474.9 |
| 72.5° | 13848.9 | 14099.0 | 14640.5 | 16026.2 | 18130.2 | 19253.1 | 16980.3 | 14694.7 | 13353.6 | 12759.5 | 12670.3 |
| 75°   | 9430.6  | 9836.8  | 10653.9 | 12652.8 | 15489.5 | 16669.7 | 14294.9 | 11716.2 | 10454.8 | 9632.9  | 9572.4  |
| 77.5° | 4204.8  | 4297.2  | 5332.5  | 7634.0  | 10688.9 | 11971.1 | 10386.3 | 7664.3  | 5753.0  | 4588.7  | 4343.4  |
| 80°   | 1172.3  | 1186.6  | 1583.2  | 2843.1  | 5350.0  | 7033.6  | 5743.4  | 2986.4  | 1678.8  | 1183.4  | 1114.9  |
| 82.5° | 372.7   | 404.6   | 493.8   | 737.4   | 1798.2  | 3209.4  | 1846.0  | 796.4   | 567.0   | 452.3   | 407.7   |
| 85°   | 181.6   | 180.0   | 250.1   | 299.4   | 458.7   | 710.4   | 489.0   | 369.5   | 323.3   | 215.0   | 194.3   |
| 87.5° | 76.5    | 78.0    | 116.3   | 105.1   | 133.8   | 114.7   | 157.7   | 165.6   | 173.6   | 95.6    | 82.8    |
| 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)