

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: STREETWORKS

Report Number: P316978

Luminaire Tested: **GAN-SA4D-830-U-5NQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P316978  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA4D-830-U-5NQ  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3000K, 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: 25657 lumens  
Efficiency: N/A  
Efficacy: 99.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B4 - U0 - G2

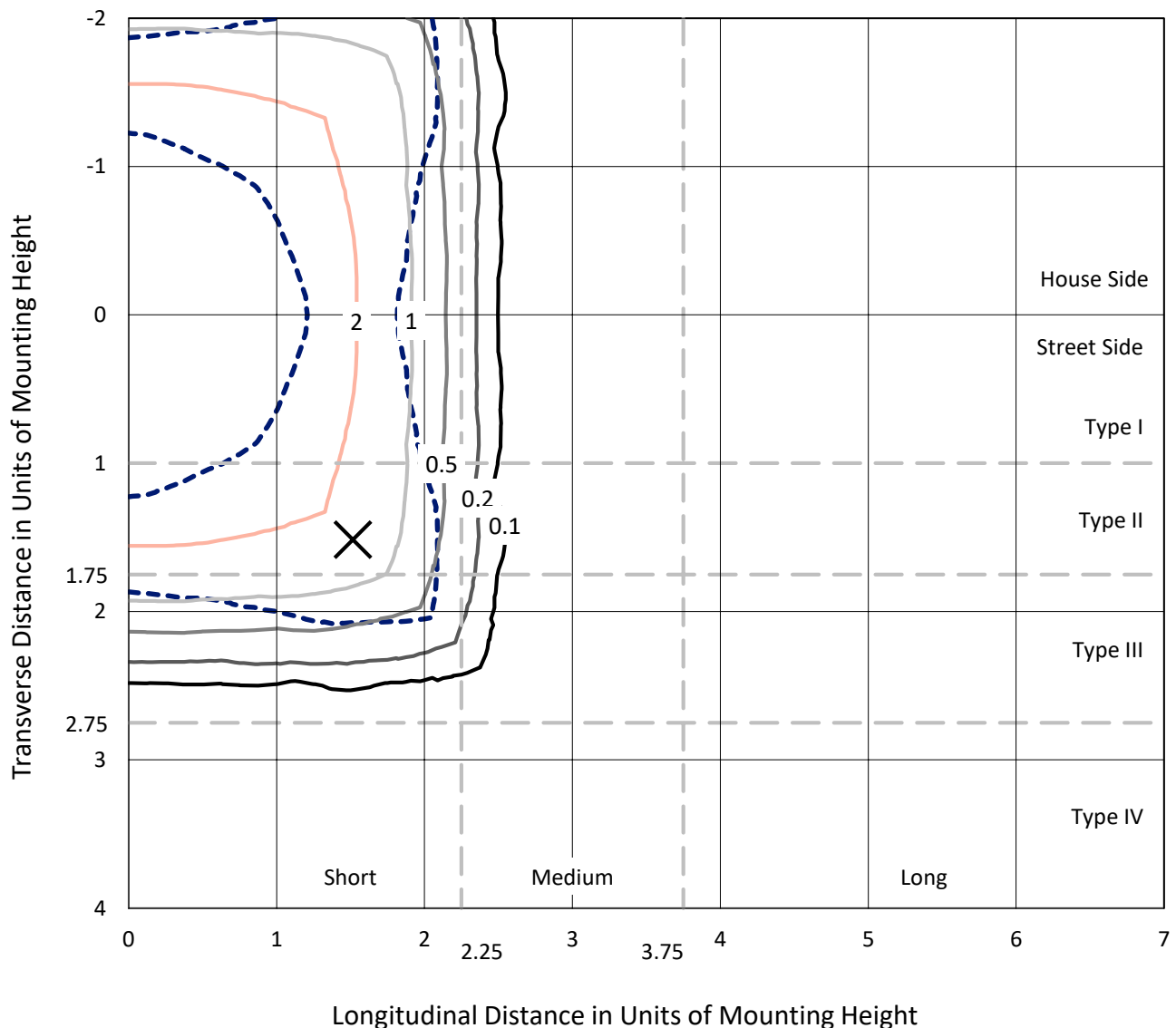
Input Watts (W): 258  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P316978  
 CATALOG NUMBER: GAN-SA4D-830-U-5NQ

## Iso-Footcandle Lines of Horizontal Illumination

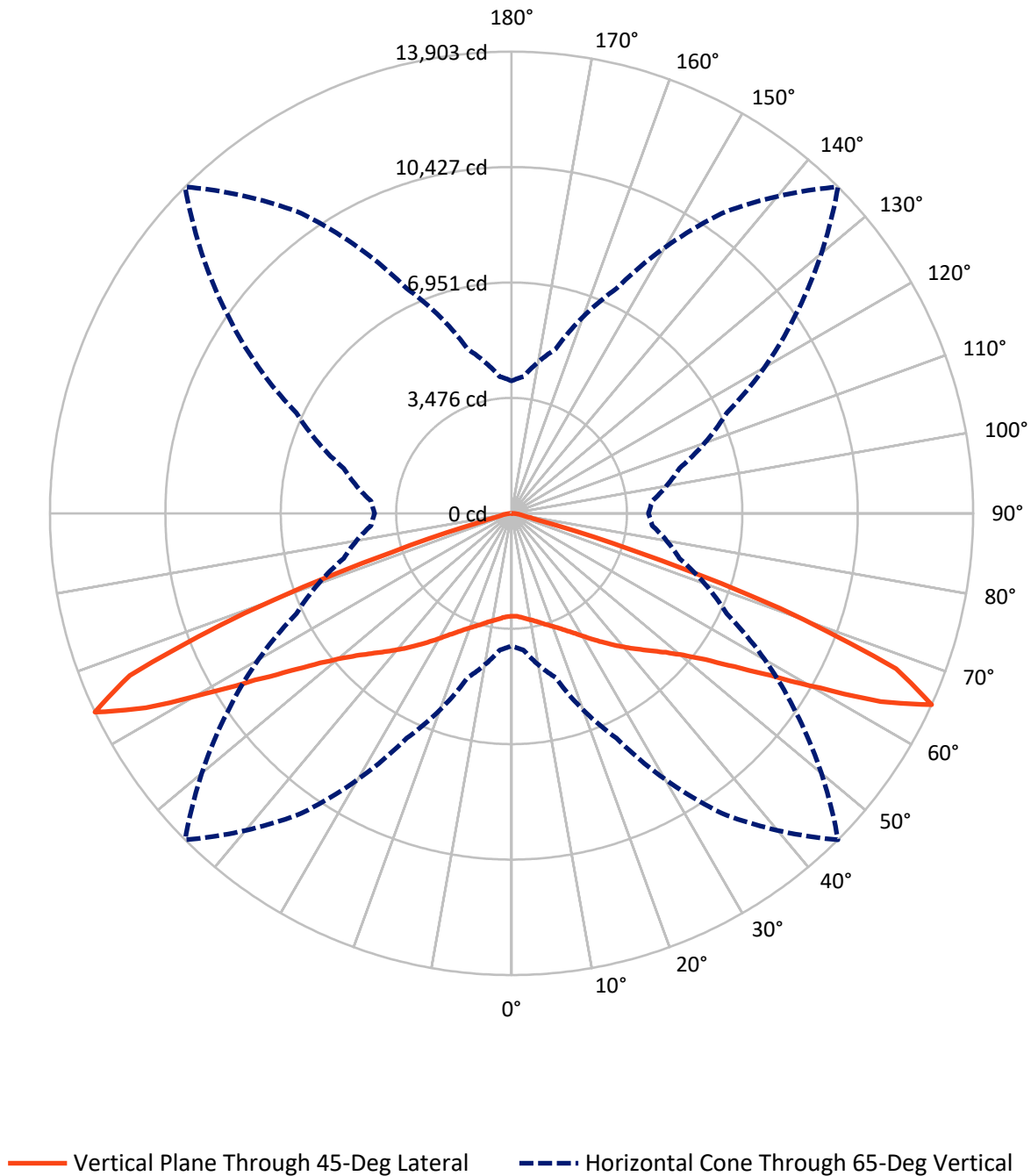
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc  
 Type V - Short - N/A

REPORT NUMBER: P316978  
CATALOG NUMBER: GAN-SA4D-830-U-5NQ

## Luminous Intensity Polar Plot



REPORT NUMBER: P316978

CATALOG NUMBER: GAN-SA4D-830-U-5NQ

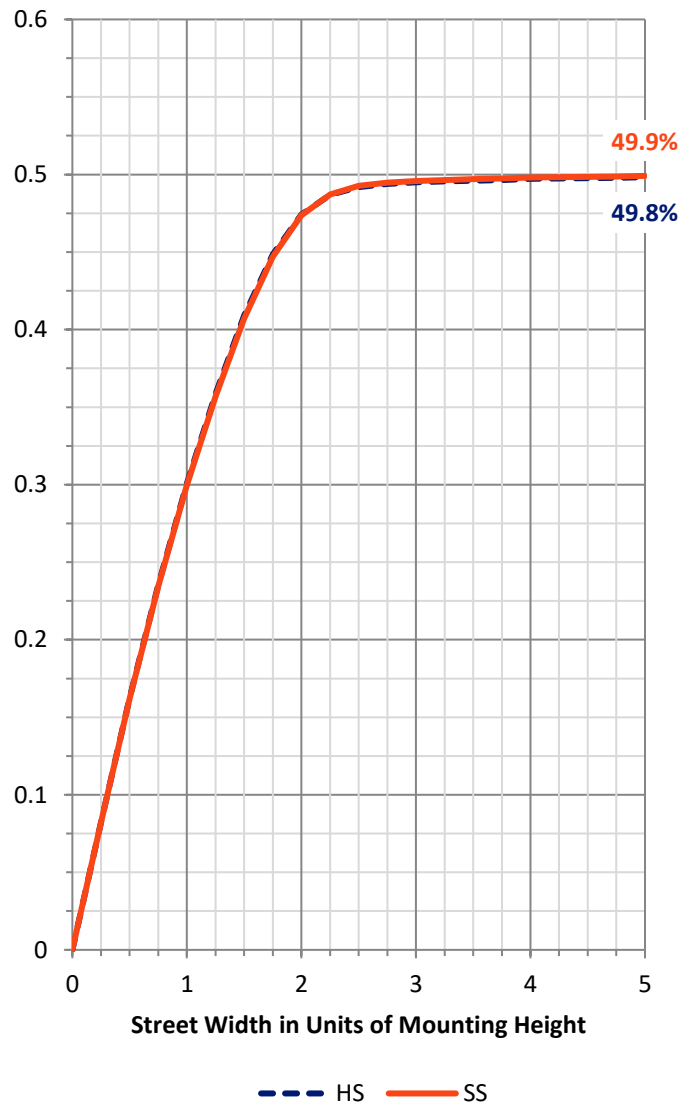
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 12828.5  | 0.0    | 12828.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 12828.5  | 0.0    | 12828.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 25657.0  | 0.0    | 25657.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 304.0   | 1.2       |
| 10°-20°   | 977.1   | 3.8       |
| 20°-30°   | 1833.3  | 7.1       |
| 30°-40°   | 3031.9  | 11.8      |
| 40°-50°   | 4695.9  | 18.3      |
| 50°-60°   | 7202.2  | 28.1      |
| 60°-70°   | 6720.5  | 26.2      |
| 70°-80°   | 782.2   | 3.0       |
| 80°-90°   | 109.9   | 0.4       |
| 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°    | 25657.0 | 100.0     |
| 0°-180°   | 25657.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P316978

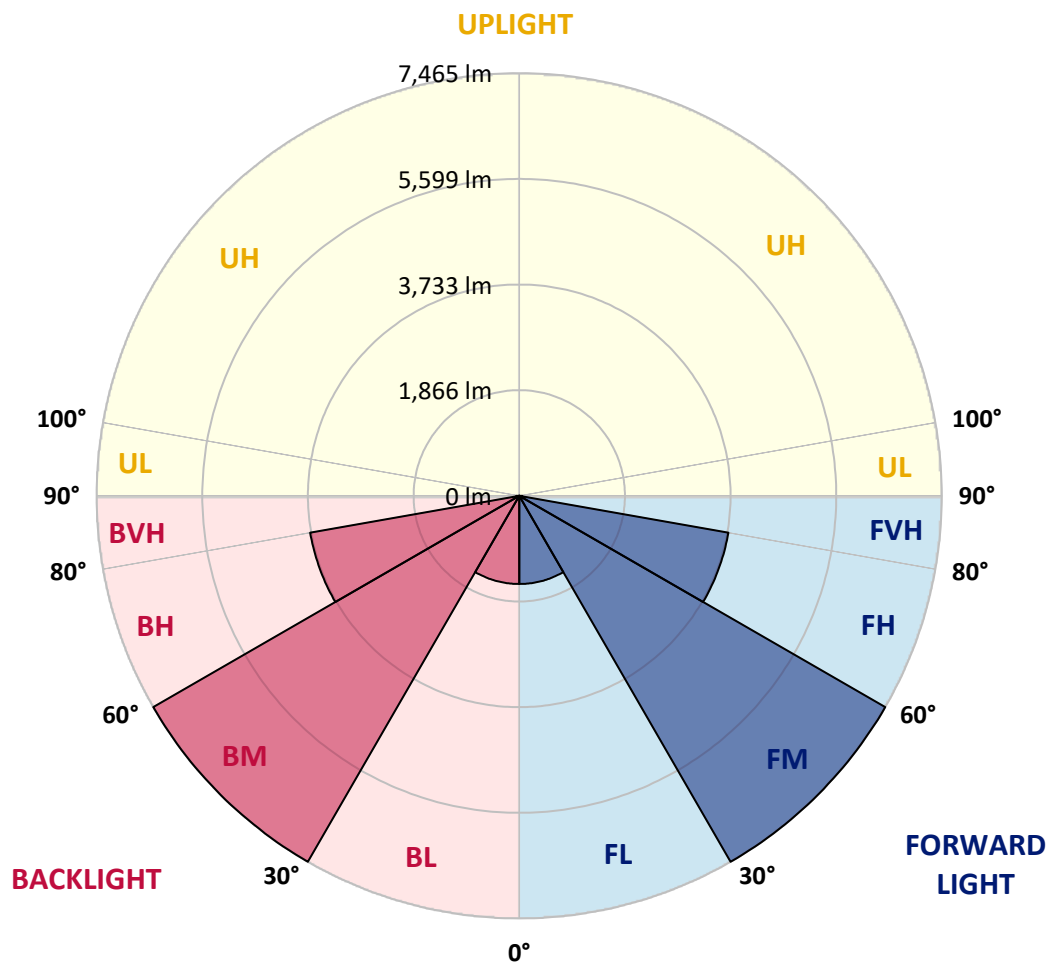
CATALOG NUMBER: GAN-SA4D-830-U-5NQ

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1557.2 | 6.1       |                         |      |         |
| FM   | (30°-60°)   | 7465.0 | 29.1      |                         |      |         |
| FH   | (60°-80°)   | 3751.3 | 14.6      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 55.0   | 0.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 1557.2 | 6.1       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 7465.0 | 29.1      | B4/8500                 |      |         |
| BH   | (60°-80°)   | 3751.3 | 14.6      | B4/5000                 |      | G2/5000 |
| BVH  | (80°-90°)   | 55.0   | 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





REPORT NUMBER: P316978

CATALOG NUMBER: GAN-SA4D-830-U-5NQ

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°     | 45°     | 55°     | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|---------|---------|---------|--------|--------|--------|--------|
| 0°    | 3098.4 | 3098.4 | 3098.4 | 3098.4 | 3098.4  | 3098.4  | 3098.4  | 3098.4 | 3098.4 | 3098.4 | 3098.4 |
| 2.5°  | 3108.6 | 3106.9 | 3108.6 | 3109.5 | 3104.4  | 3106.9  | 3106.1  | 3110.3 | 3112.0 | 3110.3 | 3110.3 |
| 5°    | 3144.4 | 3141.8 | 3145.3 | 3149.5 | 3142.7  | 3144.4  | 3141.8  | 3147.0 | 3148.7 | 3145.3 | 3147.8 |
| 7.5°  | 3193.8 | 3194.6 | 3198.1 | 3205.7 | 3201.5  | 3204.9  | 3199.8  | 3200.6 | 3199.8 | 3194.6 | 3195.5 |
| 10°   | 3247.5 | 3248.3 | 3254.3 | 3264.5 | 3266.2  | 3266.2  | 3262.8  | 3260.2 | 3256.8 | 3253.4 | 3254.3 |
| 12.5° | 3312.2 | 3316.4 | 3320.7 | 3333.5 | 3333.5  | 3340.3  | 3338.6  | 3331.8 | 3325.8 | 3320.7 | 3320.7 |
| 15°   | 3399.9 | 3399.1 | 3404.2 | 3416.9 | 3422.9  | 3434.0  | 3434.0  | 3424.6 | 3416.9 | 3411.8 | 3410.1 |
| 17.5° | 3491.9 | 3494.4 | 3497.8 | 3513.2 | 3522.5  | 3535.3  | 3537.0  | 3529.4 | 3524.2 | 3517.4 | 3513.2 |
| 20°   | 3599.2 | 3603.5 | 3617.1 | 3623.0 | 3631.6  | 3643.5  | 3647.7  | 3646.0 | 3640.9 | 3637.5 | 3638.4 |
| 22.5° | 3724.4 | 3735.5 | 3744.0 | 3752.5 | 3762.7  | 3771.2  | 3775.5  | 3781.5 | 3776.3 | 3773.8 | 3772.1 |
| 25°   | 3876.0 | 3883.7 | 3900.7 | 3916.0 | 3922.8  | 3925.4  | 3930.5  | 3939.0 | 3938.2 | 3932.2 | 3932.2 |
| 27.5° | 4048.0 | 4062.5 | 4083.8 | 4105.9 | 4105.9  | 4097.4  | 4114.5  | 4128.9 | 4123.8 | 4116.2 | 4105.9 |
| 30°   | 4256.7 | 4270.3 | 4295.0 | 4325.7 | 4310.3  | 4304.4  | 4327.4  | 4353.8 | 4346.1 | 4333.3 | 4331.6 |
| 32.5° | 4481.5 | 4494.3 | 4526.7 | 4559.9 | 4540.3  | 4531.8  | 4556.5  | 4594.8 | 4581.2 | 4555.6 | 4540.3 |
| 35°   | 4725.1 | 4737.9 | 4783.9 | 4823.9 | 4790.7  | 4776.2  | 4796.7  | 4838.4 | 4814.5 | 4766.8 | 4754.9 |
| 37.5° | 4990.0 | 4996.8 | 5056.4 | 5097.3 | 5074.3  | 5036.0  | 5061.5  | 5092.2 | 5071.7 | 5013.8 | 4990.8 |
| 40°   | 5265.1 | 5289.8 | 5358.8 | 5406.5 | 5366.4  | 5306.0  | 5348.5  | 5391.1 | 5360.5 | 5286.4 | 5247.2 |
| 42.5° | 5586.2 | 5604.9 | 5696.9 | 5739.5 | 5674.7  | 5589.6  | 5647.5  | 5705.4 | 5674.7 | 5603.2 | 5569.1 |
| 45°   | 5920.0 | 5949.0 | 6058.8 | 6101.4 | 6007.7  | 5899.6  | 5970.3  | 6071.6 | 6069.1 | 5966.0 | 5930.2 |
| 47.5° | 6283.7 | 6312.6 | 6443.8 | 6500.0 | 6398.7  | 6253.9  | 6353.5  | 6496.6 | 6486.4 | 6373.1 | 6344.2 |
| 50°   | 6703.6 | 6734.2 | 6897.7 | 6968.4 | 6873.9  | 6705.3  | 6855.2  | 6981.2 | 6962.5 | 6822.8 | 6825.4 |
| 52.5° | 7230.8 | 7229.1 | 7432.6 | 7555.2 | 7458.2  | 7309.1  | 7447.1  | 7569.7 | 7492.2 | 7298.9 | 7292.9 |
| 55°   | 7692.4 | 7720.5 | 7972.6 | 8205.1 | 8199.1  | 8142.0  | 8197.4  | 8202.5 | 7981.1 | 7723.9 | 7692.4 |
| 57.5° | 7995.6 | 8049.2 | 8404.4 | 8825.1 | 9140.2  | 9216.0  | 9108.7  | 8783.4 | 8264.7 | 7853.3 | 7803.1 |
| 60°   | 7809.0 | 7890.8 | 8448.7 | 9306.3 | 10234.6 | 10680.1 | 10074.5 | 9065.3 | 8044.1 | 7470.9 | 7402.8 |
| 62.5° | 6550.3 | 6688.2 | 7505.0 | 9073.8 | 11176.6 | 12478.8 | 10774.6 | 8613.0 | 7166.9 | 6377.4 | 6260.7 |
| 65°   | 3989.3 | 4134.9 | 5119.4 | 7468.4 | 11024.1 | 13902.8 | 10455.2 | 7149.0 | 5231.0 | 4249.0 | 4123.0 |
| 67.5° | 1329.5 | 1372.1 | 1952.0 | 4128.1 | 8664.1  | 12491.6 | 8678.6  | 4279.7 | 2276.5 | 1509.2 | 1464.9 |
| 70°   | 520.4  | 524.6  | 619.2  | 1196.6 | 4091.5  | 8579.8  | 4514.7  | 1217.9 | 647.3  | 511.9  | 522.9  |
| 72.5° | 382.4  | 384.1  | 410.5  | 499.9  | 1066.3  | 3779.8  | 1104.6  | 502.5  | 399.4  | 358.6  | 358.6  |
| 75°   | 307.5  | 307.5  | 326.2  | 364.5  | 477.8   | 867.0   | 484.6   | 360.3  | 312.6  | 286.2  | 282.8  |
| 77.5° | 242.7  | 247.8  | 262.3  | 287.0  | 323.6   | 417.3   | 335.6   | 285.3  | 252.1  | 227.4  | 222.3  |
| 80°   | 180.6  | 185.7  | 209.5  | 221.4  | 232.5   | 289.6   | 247.8   | 223.1  | 199.3  | 170.3  | 165.2  |
| 82.5° | 118.4  | 123.5  | 153.3  | 160.1  | 157.6   | 189.1   | 166.9   | 164.4  | 146.5  | 109.9  | 104.8  |
| 85°   | 77.5   | 79.2   | 102.2  | 106.5  | 97.9    | 86.0    | 106.5   | 112.4  | 102.2  | 71.5   | 69.0   |
| 87.5° | 36.6   | 36.6   | 52.0   | 48.5   | 44.3    | 35.8    | 48.5    | 57.1   | 57.9   | 34.9   | 34.1   |
| 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)