

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: P529548

Luminaire Tested: **GALN-SA4D-727-U-5MQ-GRSWH**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P529548  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4D-727-U-5MQ-GRSWH  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V  
MEDIUM OPTICS WITH WHITE GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22590 lumens  
Efficiency: N/A  
Efficacy: 92.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B4 - U0 - G1

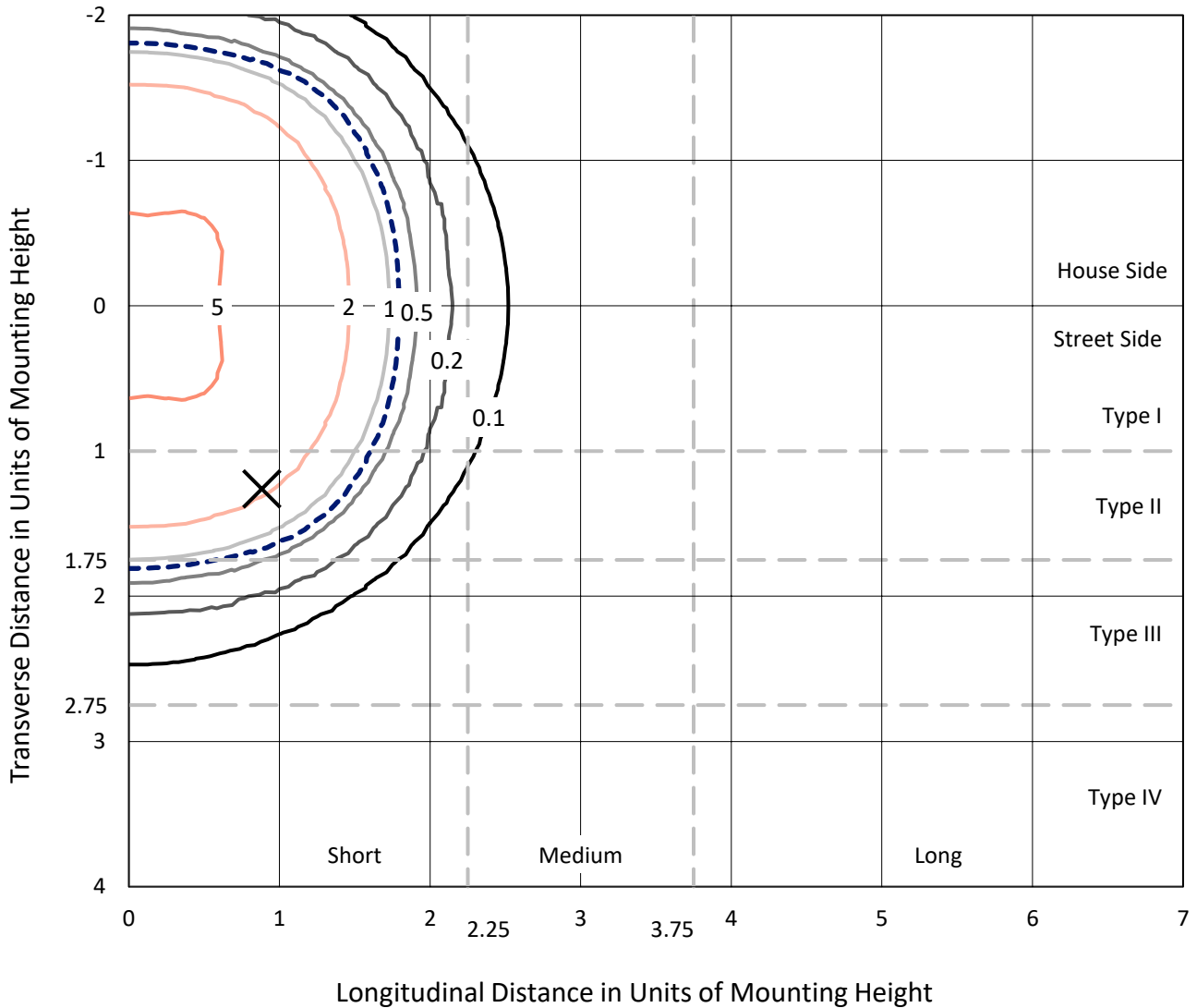
Input Watts (W): 245  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

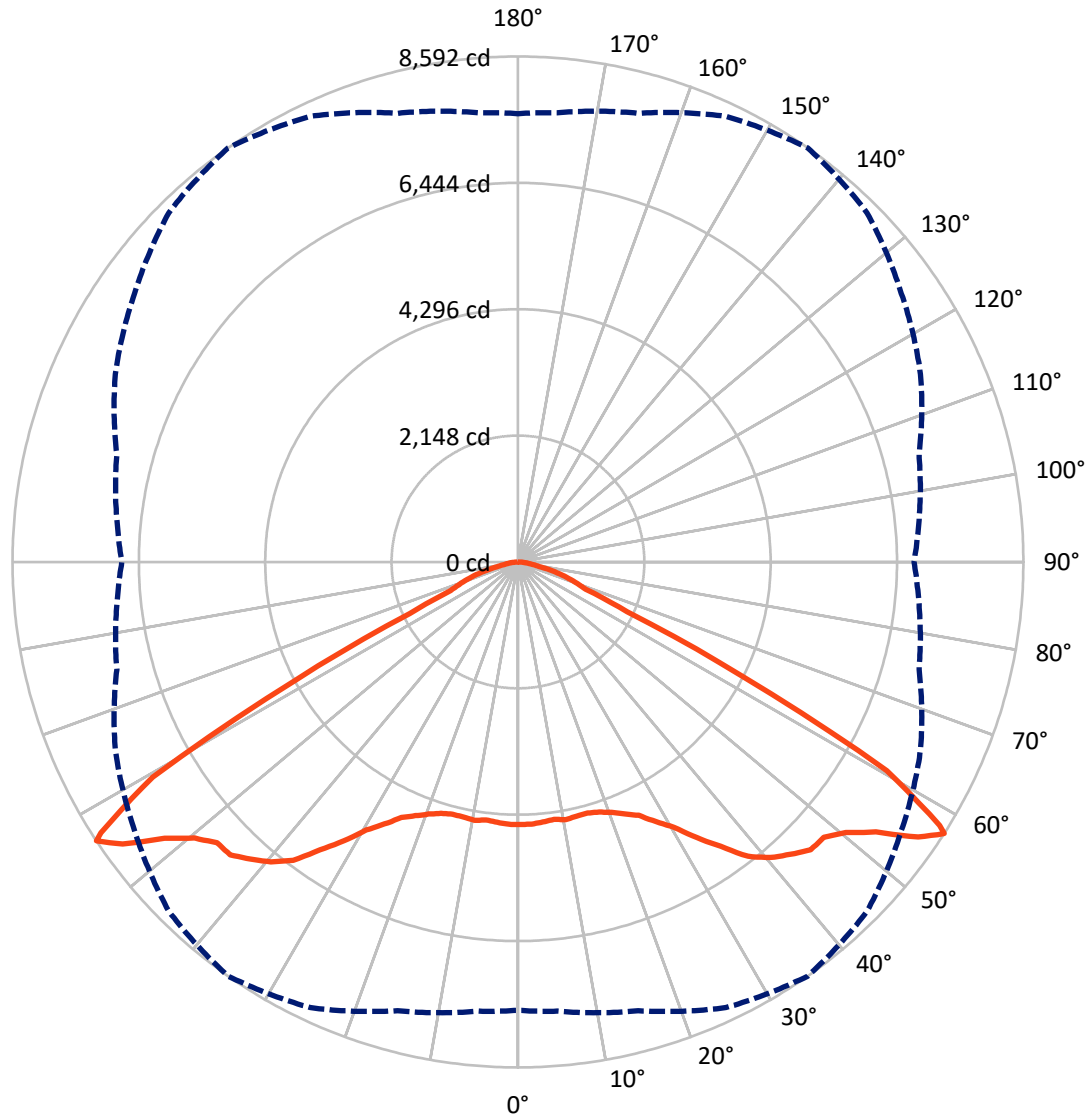
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral    - - - Horizontal Cone Through 57-Deg Vertical

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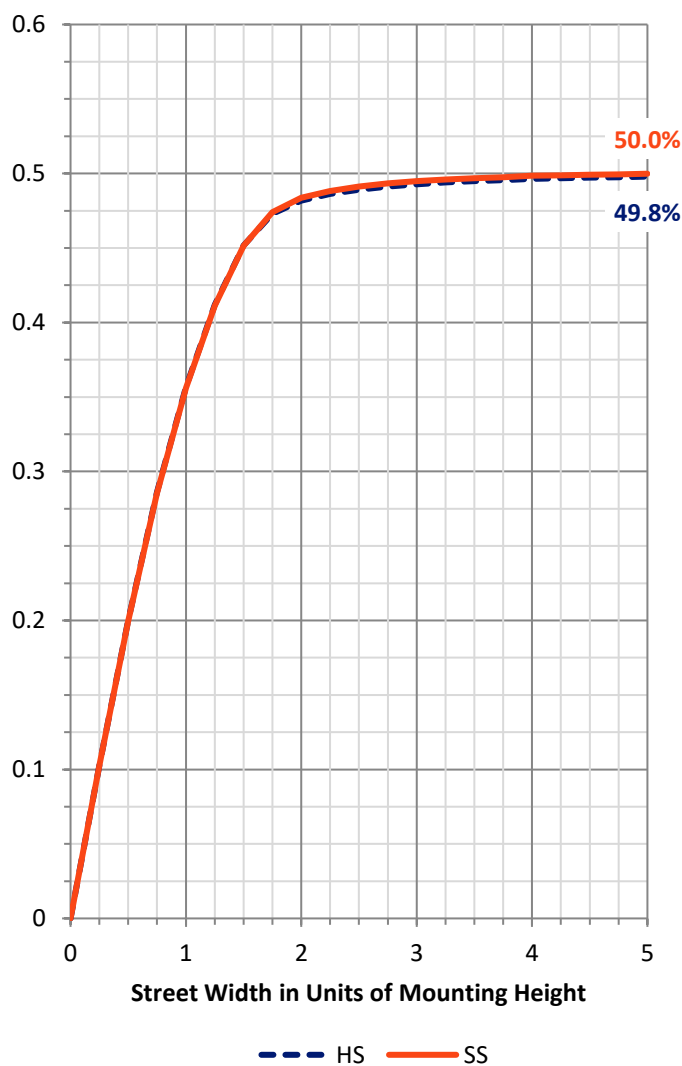
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 11295.0  | 0.0    | 11295.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 11295.0  | 0.0    | 11295.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 22590.0  | 0.0    | 22590.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 422.9   | 1.9       |
| 10°-20°   | 1252.7  | 5.5       |
| 20°-30°   | 2187.8  | 9.7       |
| 30°-40°   | 3584.7  | 15.9      |
| 40°-50°   | 5256.1  | 23.3      |
| 50°-60°   | 6620.4  | 29.3      |
| 60°-70°   | 2489.9  | 11.0      |
| 70°-80°   | 662.0   | 2.9       |
| 80°-90°   | 113.5   | 0.5       |
| 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°    | 22590.0 | 100.0     |
| 0°-180°   | 22590.0 | 100.0     |

**Coefficient of Utilization**



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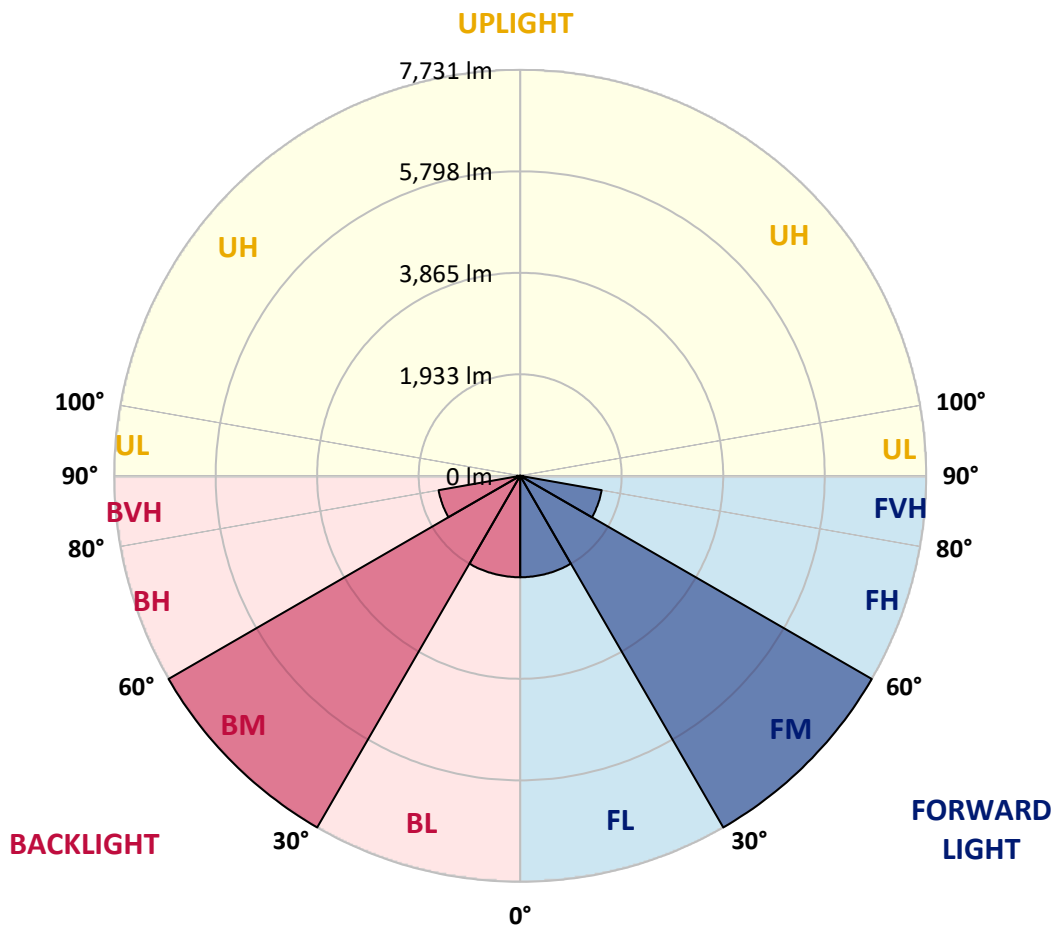
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1931.7 | 8.6       |                         |      |         |
| FM (30°-60°)   | 7730.6 | 34.2      |                         |      |         |
| FH (60°-80°)   | 1576.0 | 7.0       |                         |      | G1/1800 |
| FVH (80°-90°)  | 56.8   | 0.3       |                         |      | G1/100  |
| BL (0°-30°)    | 1931.7 | 8.6       | B3/2500                 |      |         |
| BM (30°-60°)   | 7730.6 | 34.2      | B4/8500                 |      |         |
| BH (60°-80°)   | 1576.0 | 7.0       | B3/2500                 |      | G1/1800 |
| BVH (80°-90°)  | 56.8   | 0.3       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4461.4 | 4461.4 | 4461.4 | 4461.4 | 4461.4 | 4461.4 | 4461.4 | 4461.4 | 4461.4 | 4461.4 | 4461.4 |
| 2.5°  | 4439.1 | 4483.6 | 4464.1 | 4453.0 | 4461.4 | 4447.4 | 4425.2 | 4450.2 | 4444.7 | 4422.4 | 4414.0 |
| 5°    | 4428.0 | 4461.4 | 4439.1 | 4461.4 | 4439.1 | 4478.1 | 4466.9 | 4425.2 | 4475.3 | 4428.0 | 4444.7 |
| 7.5°  | 4419.6 | 4430.7 | 4436.3 | 4425.2 | 4416.8 | 4464.1 | 4439.1 | 4419.6 | 4391.8 | 4383.4 | 4397.3 |
| 10°   | 4400.1 | 4428.0 | 4386.2 | 4441.9 | 4453.0 | 4419.6 | 4419.6 | 4383.4 | 4361.2 | 4347.3 | 4394.6 |
| 12.5° | 4450.2 | 4402.9 | 4397.3 | 4425.2 | 4433.5 | 4447.4 | 4408.5 | 4389.0 | 4347.3 | 4352.8 | 4344.5 |
| 15°   | 4391.8 | 4411.3 | 4414.0 | 4419.6 | 4428.0 | 4461.4 | 4425.2 | 4383.4 | 4366.7 | 4308.3 | 4313.9 |
| 17.5° | 4414.0 | 4394.6 | 4414.0 | 4478.1 | 4466.9 | 4492.0 | 4453.0 | 4389.0 | 4350.0 | 4316.6 | 4361.2 |
| 20°   | 4453.0 | 4444.7 | 4453.0 | 4530.9 | 4544.9 | 4567.1 | 4533.7 | 4475.3 | 4400.1 | 4361.2 | 4383.4 |
| 22.5° | 4494.8 | 4489.2 | 4494.8 | 4569.9 | 4650.6 | 4678.4 | 4645.0 | 4508.7 | 4469.7 | 4397.3 | 4372.3 |
| 25°   | 4569.9 | 4575.5 | 4633.9 | 4717.4 | 4770.3 | 4823.2 | 4761.9 | 4664.5 | 4539.3 | 4494.8 | 4441.9 |
| 27.5° | 4736.9 | 4750.8 | 4784.2 | 4906.7 | 4998.5 | 5045.8 | 4959.5 | 4825.9 | 4748.0 | 4656.2 | 4642.3 |
| 30°   | 4942.8 | 4942.8 | 5001.3 | 5107.0 | 5232.3 | 5304.6 | 5198.9 | 5040.2 | 4945.6 | 4895.5 | 4864.9 |
| 32.5° | 5215.6 | 5185.0 | 5207.2 | 5393.7 | 5588.5 | 5649.8 | 5507.8 | 5313.0 | 5162.7 | 5095.9 | 5073.6 |
| 35°   | 5449.4 | 5468.9 | 5518.9 | 5719.3 | 5936.4 | 6078.4 | 5855.7 | 5602.4 | 5449.4 | 5388.1 | 5377.0 |
| 37.5° | 5752.7 | 5786.1 | 5811.2 | 6086.7 | 6348.3 | 6401.2 | 6186.9 | 5983.7 | 5797.3 | 5747.2 | 5719.3 |
| 40°   | 6181.3 | 6159.1 | 6167.4 | 6370.6 | 6607.2 | 6640.5 | 6429.0 | 6284.3 | 6131.2 | 6100.6 | 6100.6 |
| 42.5° | 6534.8 | 6509.7 | 6537.6 | 6612.7 | 6793.6 | 6768.6 | 6651.7 | 6545.9 | 6481.9 | 6448.5 | 6481.9 |
| 45°   | 6749.1 | 6743.5 | 6793.6 | 6849.3 | 6977.3 | 6893.8 | 6802.0 | 6818.7 | 6757.4 | 6701.8 | 6699.0 |
| 47.5° | 6982.9 | 6946.7 | 7007.9 | 7091.4 | 6994.0 | 6955.0 | 6949.5 | 6985.7 | 6966.2 | 6868.8 | 6838.2 |
| 50°   | 7097.0 | 7083.1 | 7180.5 | 7277.9 | 7225.0 | 7135.9 | 7155.4 | 7213.9 | 6963.4 | 6832.6 | 6757.4 |
| 52.5° | 7403.1 | 7405.9 | 7592.4 | 7645.3 | 7623.0 | 7492.2 | 7533.9 | 7375.3 | 7080.3 | 6896.6 | 6904.9 |
| 55°   | 7884.6 | 7865.1 | 8073.9 | 8229.7 | 8254.8 | 8087.8 | 7887.4 | 7664.7 | 7294.6 | 7108.1 | 7052.5 |
| 57°   | 7620.2 | 7664.7 | 7895.7 | 8357.7 | 8591.5 | 8393.9 | 7957.0 | 7550.6 | 7058.0 | 6832.6 | 6732.4 |
| 57.5° | 7266.8 | 7339.1 | 7739.9 | 8204.7 | 8449.6 | 8432.9 | 7870.7 | 7339.1 | 6899.4 | 6548.7 | 6557.1 |
| 60°   | 5324.1 | 5338.0 | 5699.9 | 6437.4 | 7202.7 | 7219.4 | 6534.8 | 5830.7 | 5340.8 | 4959.5 | 5012.4 |
| 62.5° | 2808.2 | 2872.2 | 3016.9 | 3609.7 | 4272.1 | 4433.5 | 4018.8 | 3657.0 | 3234.0 | 2944.6 | 2972.4 |
| 65°   | 1486.2 | 1477.8 | 1547.4 | 1714.4 | 2040.0 | 2123.5 | 2067.9 | 1781.2 | 1633.7 | 1586.4 | 1589.2 |
| 67.5° | 1207.9 | 1221.8 | 1213.4 | 1221.8 | 1244.1 | 1280.2 | 1271.9 | 1283.0 | 1291.4 | 1305.3 | 1302.5 |
| 70°   | 1024.2 | 1024.2 | 1029.8 | 1032.5 | 1032.5 | 1049.2 | 1068.7 | 1104.9 | 1107.7 | 1121.6 | 1127.2 |
| 72.5° | 807.1  | 801.5  | 809.9  | 829.4  | 832.2  | 846.1  | 873.9  | 896.2  | 904.5  | 904.5  | 887.8  |
| 75°   | 548.3  | 553.8  | 565.0  | 581.7  | 598.4  | 623.4  | 645.7  | 659.6  | 665.2  | 656.8  | 648.5  |
| 77.5° | 308.9  | 314.5  | 322.8  | 347.9  | 367.4  | 389.6  | 414.7  | 428.6  | 442.5  | 445.3  | 428.6  |
| 80°   | 183.7  | 183.7  | 197.6  | 217.1  | 239.3  | 261.6  | 283.9  | 300.6  | 306.1  | 306.1  | 297.8  |
| 82.5° | 111.3  | 114.1  | 125.2  | 144.7  | 164.2  | 178.1  | 197.6  | 211.5  | 222.7  | 219.9  | 214.3  |
| 85°   | 58.4   | 58.4   | 69.6   | 86.3   | 100.2  | 114.1  | 114.1  | 105.8  | 100.2  | 86.3   | 80.7   |
| 87.5° | 19.5   | 16.7   | 22.3   | 22.3   | 19.5   | 22.3   | 22.3   | 25.0   | 25.0   | 25.0   | 25.0   |
| 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)