

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: LUMARK

Report Number: P381067

Luminaire Tested: **PRV-XL-PA4B-8540-U-5WQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P381067  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: PRV-XL-PA4B-8540-U-5WQ  
Description: PREVAIL AREA AND ROADWAY LUMINAIRE  
(4) 85 CRI, 4000K, 970mA LIGHT ENGINES WITH 24 LEDS AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31999.6 lumens  
Efficiency: N/A  
Efficacy: 105.6 lumens/watt  
Luminous Opening: Rectangular (W 1.42' x L: 1.79' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G5

Input Watts (W): 303  
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: 28.75 FT

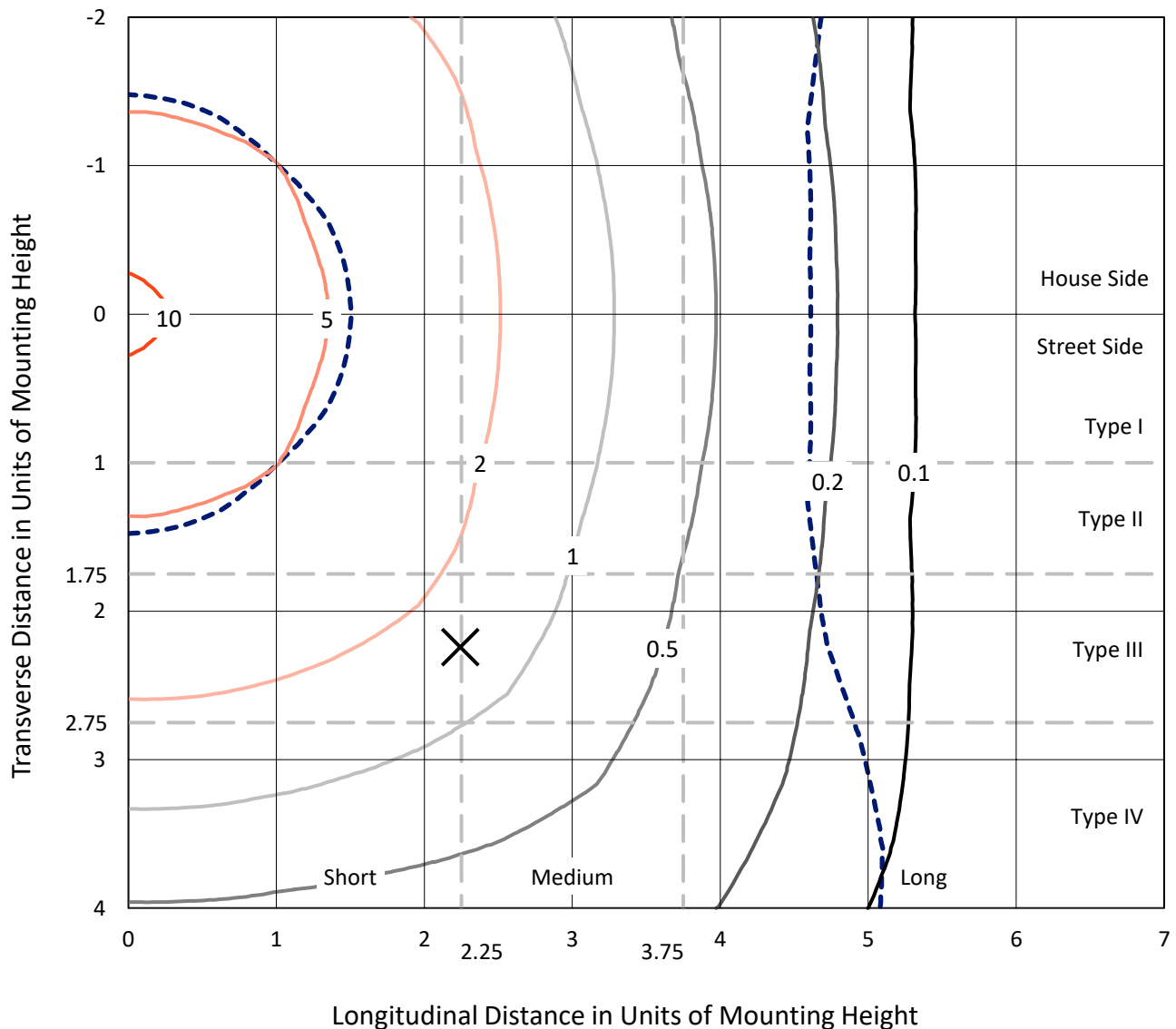


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

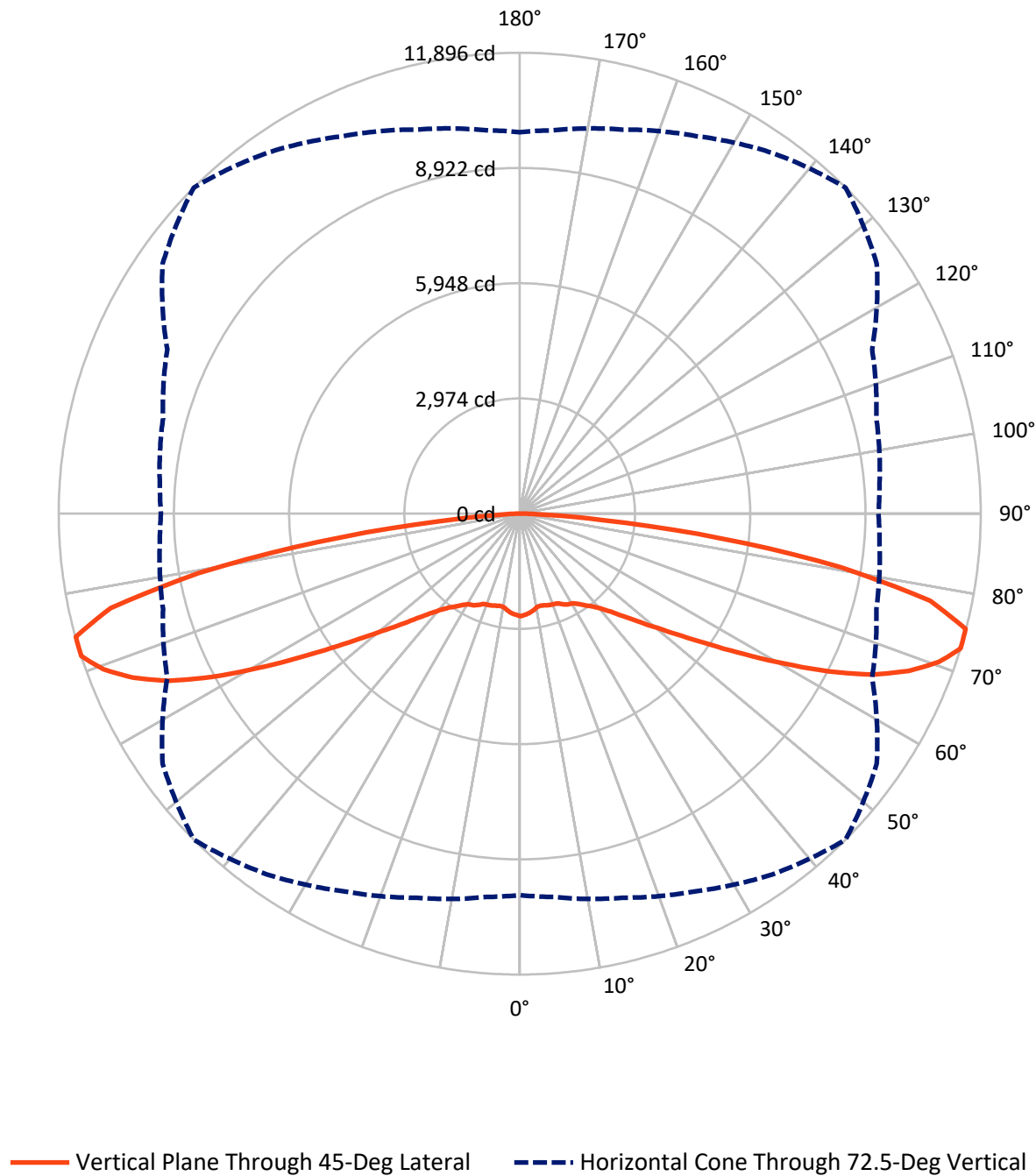


Based on 15 foot mounting height. Maximum calculated value = 11.8 fc  
 Type V - Short - N/A

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## Luminous Intensity Polar Plot



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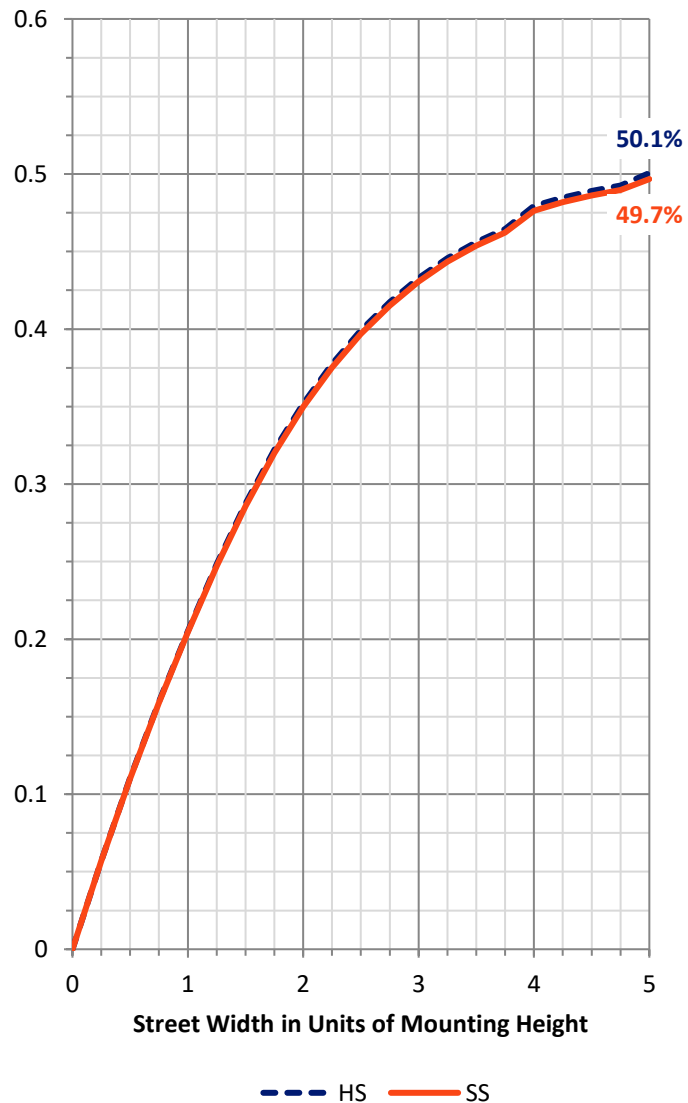
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 15999.8  | 0.0    | 15999.8 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 15999.8  | 0.0    | 15999.8 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 31999.6  | 0.0    | 31999.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 242.8   | 0.8       |
| 10°-20°   | 704.8   | 2.2       |
| 20°-30°   | 1197.6  | 3.7       |
| 30°-40°   | 1826.7  | 5.7       |
| 40°-50°   | 3007.8  | 9.4       |
| 50°-60°   | 5252.5  | 16.4      |
| 60°-70°   | 8806.0  | 27.5      |
| 70°-80°   | 9424.2  | 29.5      |
| 80°-90°   | 1537.1  | 4.8       |
| 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°    | 31999.6 | 100.0     |
| 0°-180°   | 31999.6 | 100.0     |

**Coefficient of Utilization**



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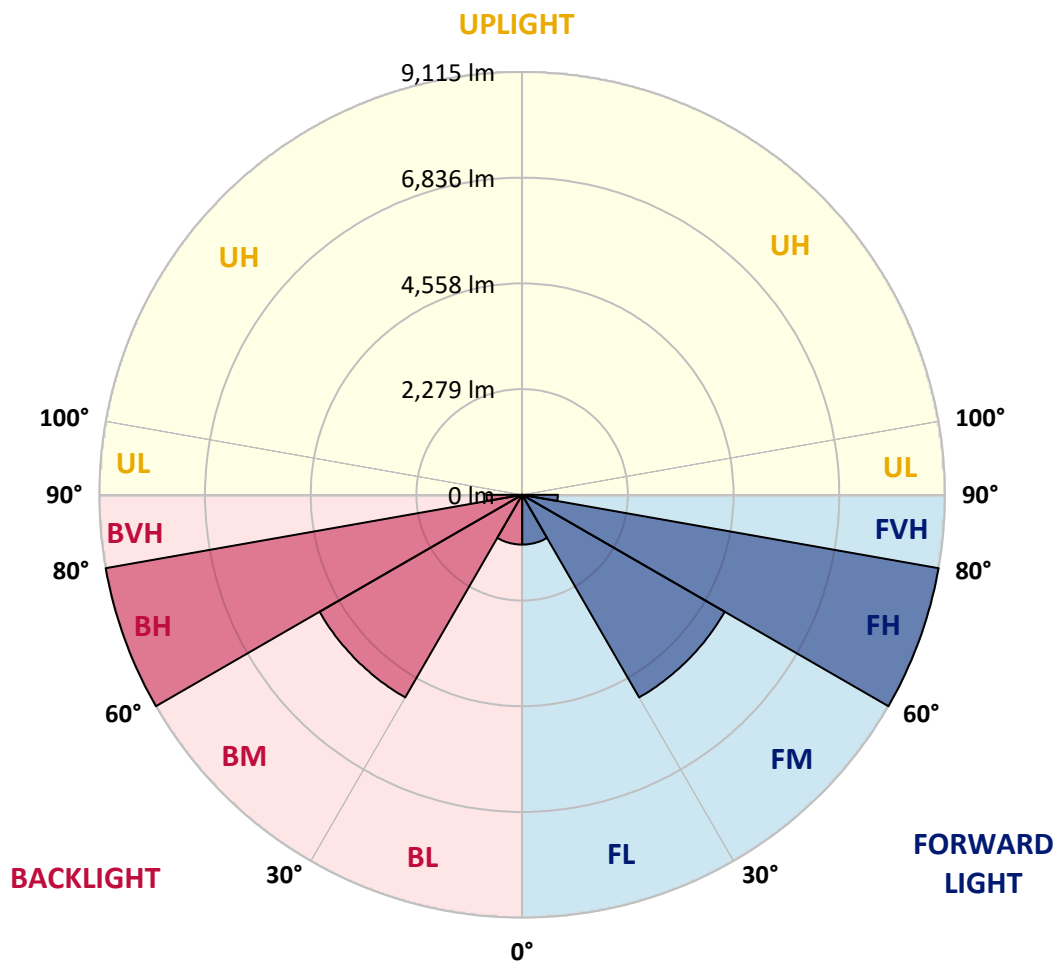
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1072.6 | 3.4       |                         |      |          |
| FM   | (30°-60°)   | 5043.5 | 15.8      |                         |      |          |
| FH   | (60°-80°)   | 9115.1 | 28.5      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 768.5  | 2.4       |                         |      | G5       |
| BL   | (0°-30°)    | 1072.6 | 3.4       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 5043.5 | 15.8      | B4/8500                 |      |          |
| BH   | (60°-80°)   | 9115.1 | 28.5      | B5                      |      | G4/12000 |
| BVH  | (80°-90°)   | 768.5  | 2.4       |                         |      | G5       |
| 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°    | 2648.0 | 2648.0  | 2648.0  | 2648.0  | 2648.0  | 2648.0  | 2648.0  | 2648.0  | 2648.0 | 2648.0 | 2648.0 |
| 2.5°  | 2631.7 | 2631.7  | 2631.7  | 2627.6  | 2619.4  | 2615.3  | 2607.2  | 2611.2  | 2611.2 | 2611.2 | 2611.2 |
| 5°    | 2598.9 | 2598.9  | 2594.9  | 2590.8  | 2582.6  | 2578.6  | 2570.4  | 2578.6  | 2578.6 | 2578.6 | 2578.6 |
| 7.5°  | 2537.7 | 2541.8  | 2541.8  | 2537.7  | 2525.4  | 2521.3  | 2509.0  | 2513.1  | 2513.1 | 2517.3 | 2513.1 |
| 10°   | 2505.0 | 2505.0  | 2500.9  | 2480.5  | 2460.0  | 2451.9  | 2447.7  | 2460.0  | 2472.3 | 2484.5 | 2484.5 |
| 12.5° | 2505.0 | 2505.0  | 2496.8  | 2464.1  | 2435.5  | 2435.5  | 2435.5  | 2451.9  | 2476.4 | 2500.9 | 2505.0 |
| 15°   | 2517.3 | 2517.3  | 2500.9  | 2464.1  | 2447.7  | 2451.9  | 2451.9  | 2468.2  | 2496.8 | 2529.5 | 2533.6 |
| 17.5° | 2525.4 | 2525.4  | 2505.0  | 2468.2  | 2468.2  | 2480.5  | 2472.3  | 2484.5  | 2513.1 | 2549.9 | 2554.0 |
| 20°   | 2537.7 | 2537.7  | 2509.0  | 2480.5  | 2480.5  | 2492.8  | 2492.8  | 2505.0  | 2529.5 | 2566.3 | 2570.4 |
| 22.5° | 2562.2 | 2558.1  | 2529.5  | 2505.0  | 2505.0  | 2513.1  | 2521.3  | 2537.7  | 2558.1 | 2590.8 | 2598.9 |
| 25°   | 2590.8 | 2590.8  | 2566.3  | 2562.2  | 2570.4  | 2590.8  | 2586.7  | 2582.6  | 2590.8 | 2619.4 | 2631.7 |
| 27.5° | 2607.2 | 2607.2  | 2590.8  | 2603.1  | 2635.7  | 2652.1  | 2631.7  | 2615.3  | 2615.3 | 2644.0 | 2648.0 |
| 30°   | 2660.2 | 2656.2  | 2639.8  | 2648.0  | 2676.6  | 2684.8  | 2672.5  | 2652.1  | 2664.3 | 2697.0 | 2701.1 |
| 32.5° | 2750.1 | 2750.1  | 2725.6  | 2725.6  | 2746.1  | 2778.8  | 2737.9  | 2725.6  | 2742.0 | 2778.8 | 2782.9 |
| 35°   | 2889.1 | 2889.1  | 2856.4  | 2840.1  | 2856.4  | 2901.3  | 2840.1  | 2835.9  | 2864.6 | 2905.5 | 2909.5 |
| 37.5° | 3064.8 | 3064.8  | 3044.4  | 3003.5  | 3007.6  | 3036.2  | 2983.1  | 2979.0  | 3032.2 | 3077.1 | 3077.1 |
| 40°   | 3285.5 | 3297.8  | 3277.3  | 3228.3  | 3211.9  | 3216.0  | 3175.1  | 3179.2  | 3240.5 | 3293.7 | 3293.7 |
| 42.5° | 3559.3 | 3567.4  | 3534.8  | 3498.0  | 3477.5  | 3465.3  | 3424.5  | 3432.6  | 3506.1 | 3575.6 | 3575.6 |
| 45°   | 3890.3 | 3894.3  | 3861.7  | 3816.7  | 3792.2  | 3784.0  | 3743.1  | 3763.6  | 3845.3 | 3918.9 | 3914.8 |
| 47.5° | 4262.2 | 4266.3  | 4233.5  | 4188.6  | 4172.2  | 4184.5  | 4143.6  | 4143.6  | 4217.2 | 4278.5 | 4270.3 |
| 50°   | 4683.0 | 4691.2  | 4654.5  | 4634.0  | 4621.7  | 4654.5  | 4605.4  | 4560.4  | 4609.5 | 4670.8 | 4662.6 |
| 52.5° | 5148.9 | 5169.4  | 5144.8  | 5153.0  | 5197.9  | 5238.8  | 5157.1  | 5059.0  | 5083.5 | 5124.3 | 5112.1 |
| 55°   | 5712.8 | 5737.4  | 5745.5  | 5774.2  | 5892.6  | 5962.1  | 5827.2  | 5663.8  | 5651.5 | 5655.6 | 5635.2 |
| 57.5° | 6346.2 | 6362.6  | 6415.7  | 6481.0  | 6726.3  | 6836.6  | 6624.1  | 6342.1  | 6252.3 | 6199.1 | 6186.9 |
| 60°   | 6983.7 | 7012.3  | 7143.1  | 7277.9  | 7653.9  | 7854.1  | 7527.2  | 7053.2  | 6861.1 | 6763.0 | 6742.6 |
| 62.5° | 7625.2 | 7682.5  | 7895.0  | 8123.9  | 8671.4  | 8969.7  | 8467.0  | 7780.6  | 7502.7 | 7380.1 | 7347.4 |
| 65°   | 8369.0 | 8438.5  | 8695.9  | 8986.0  | 9595.0  | 10015.8 | 9407.0  | 8532.4  | 8234.2 | 8070.7 | 8029.8 |
| 67.5° | 9239.4 | 9313.0  | 9521.4  | 9844.2  | 10420.4 | 10833.1 | 10293.7 | 9300.7  | 8912.5 | 8704.1 | 8671.4 |
| 70°   | 9954.5 | 10019.9 | 10244.7 | 10571.6 | 11000.7 | 11470.6 | 10955.7 | 9913.6  | 9562.2 | 9415.1 | 9394.7 |
| 72.5° | 9844.2 | 9930.0  | 10261.1 | 10751.4 | 11364.4 | 11895.6 | 11245.8 | 10032.2 | 9525.4 | 9321.1 | 9255.8 |
| 75°   | 8597.8 | 8691.8  | 9084.1  | 9970.9  | 11090.6 | 11883.4 | 10825.0 | 9243.5  | 8646.9 | 8475.3 | 8442.5 |
| 77.5° | 5692.4 | 5782.3  | 6444.3  | 7841.8  | 9684.8  | 10829.0 | 9554.1  | 7743.8  | 6783.4 | 6370.7 | 6346.2 |
| 80°   | 2300.7 | 2415.1  | 3048.5  | 4531.8  | 6865.2  | 8418.0  | 7085.8  | 4956.9  | 3342.7 | 2697.0 | 2566.3 |
| 82.5° | 535.3  | 637.5   | 927.6   | 1671.3  | 3514.3  | 5242.9  | 3820.8  | 1851.2  | 1074.7 | 764.1  | 686.5  |
| 85°   | 224.7  | 228.9   | 396.4   | 543.5   | 1099.3  | 2116.8  | 1250.5  | 674.2   | 547.6  | 400.5  | 392.3  |
| 87.5° | 85.8   | 89.9    | 192.1   | 228.9   | 351.4   | 400.5   | 425.0   | 347.3   | 322.8  | 200.2  | 192.1  |
| 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)