

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: P968271

Luminaire Tested: **NAV-SB5B-740-U-5NQ**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P968271  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5B-740-U-5NQ  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V NARROW OPTICS  
Light Source: -  
Ballast/Driver: -

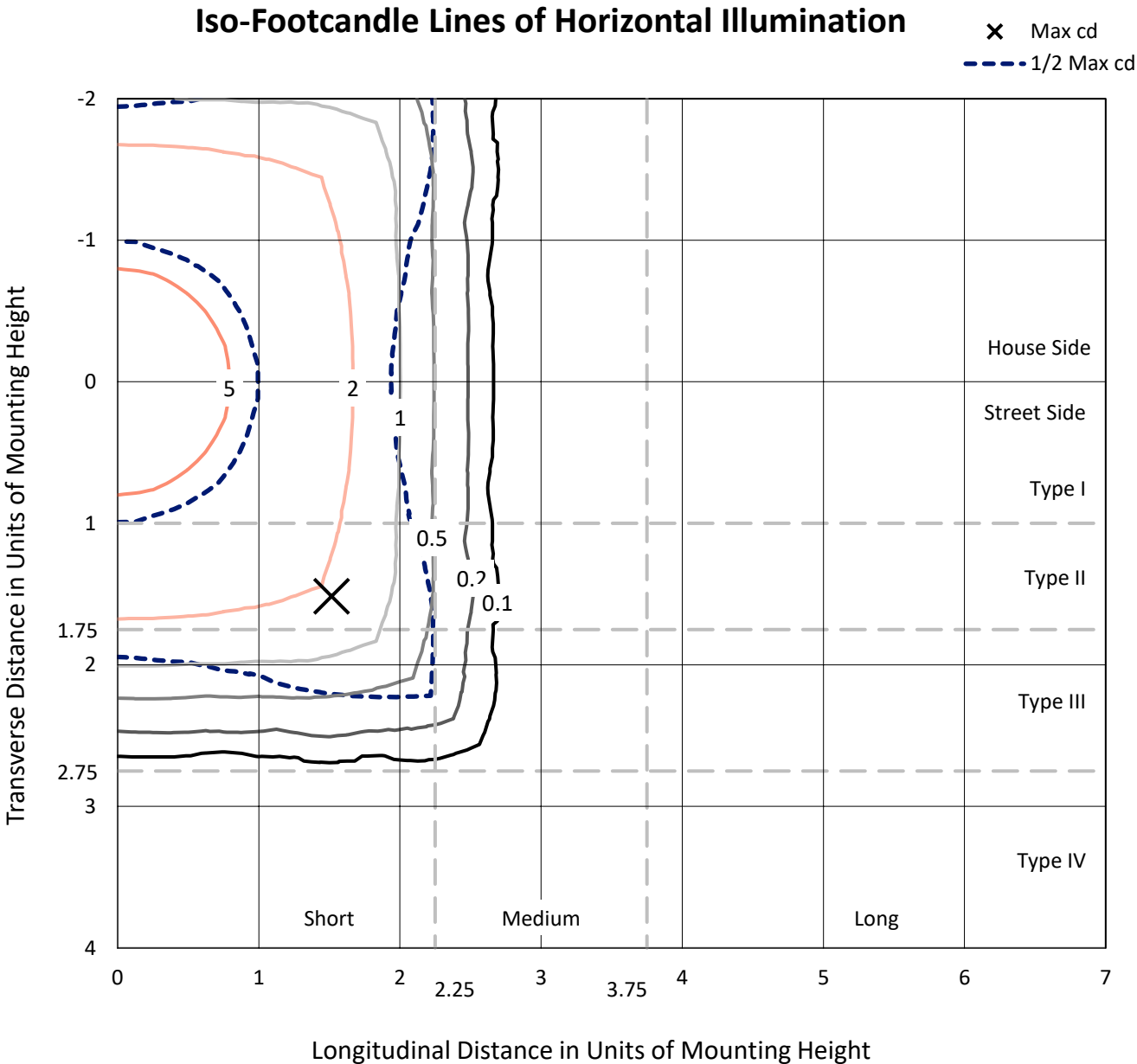
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 32323.4 lumens  
Efficiency: N/A  
Efficacy: 176.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G2

Input Watts (W): 182.7  
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



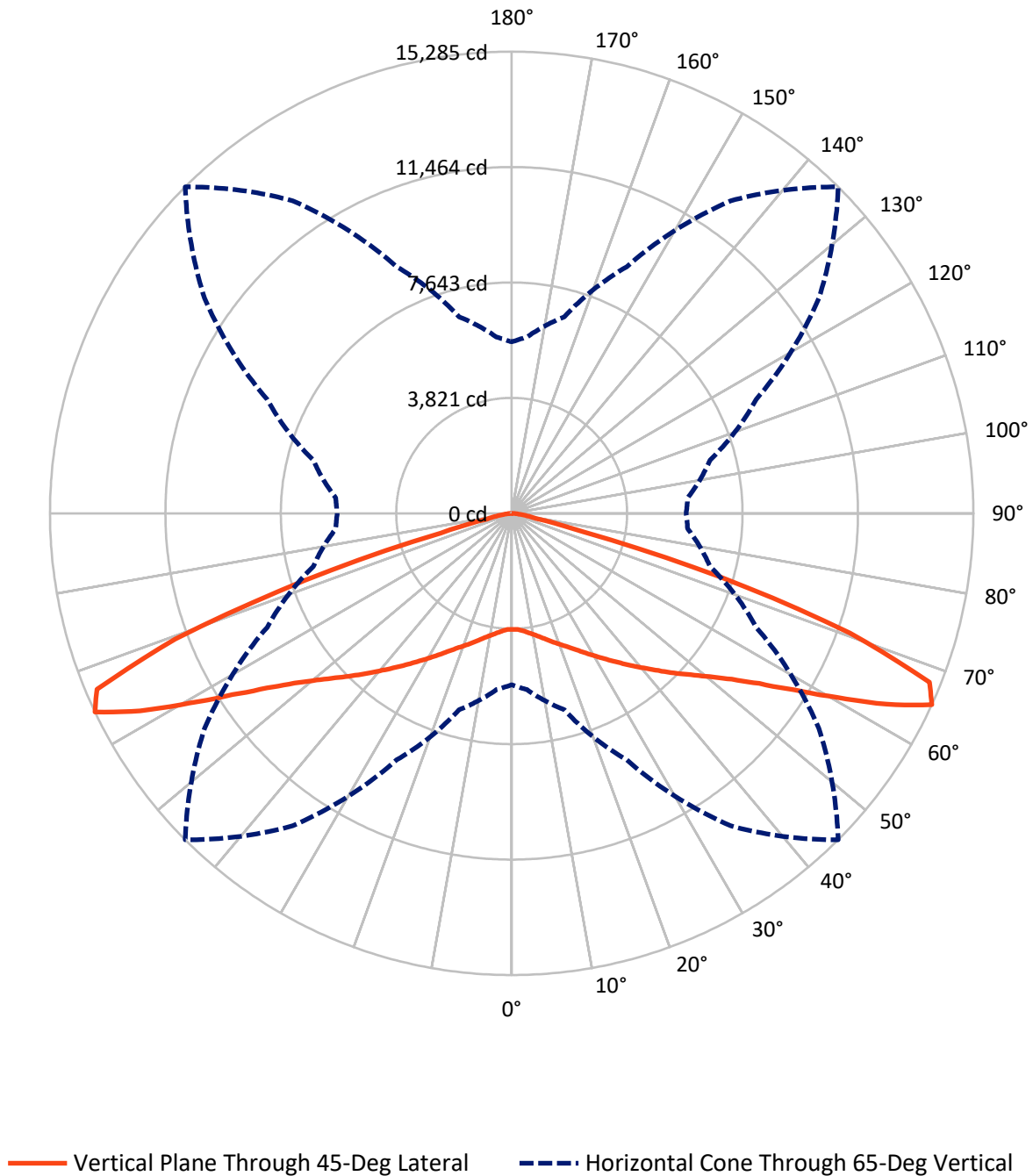
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Based on 25 foot mounting height. Maximum calculated value = 6.3 fc  
Type V - Short - N/A

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## Luminous Intensity Polar Plot



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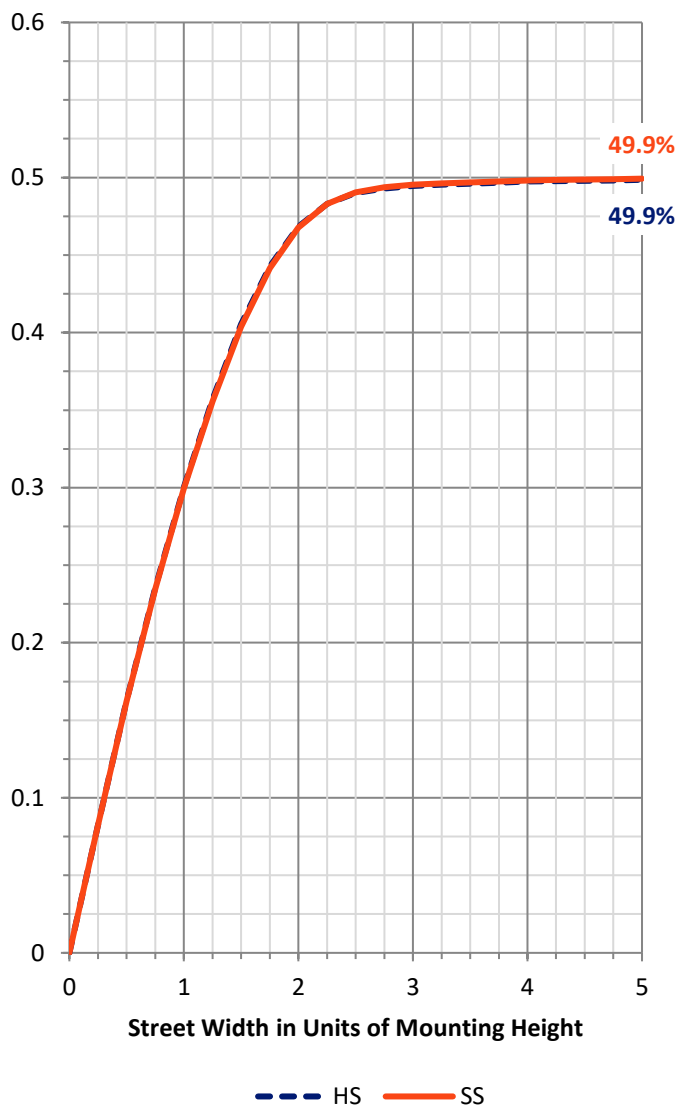
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 16161.7  | 0.0    | 16161.7 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 16161.7  | 0.0    | 16161.7 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 32323.4  | 0.0    | 32323.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 379.6   | 1.2       |
| 10°-20°   | 1238.8  | 3.8       |
| 20°-30°   | 2339.0  | 7.2       |
| 30°-40°   | 3830.0  | 11.8      |
| 40°-50°   | 5938.5  | 18.4      |
| 50°-60°   | 8772.4  | 27.1      |
| 60°-70°   | 8350.5  | 25.8      |
| 70°-80°   | 1347.5  | 4.2       |
| 80°-90°   | 127.0   | 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°    | 32323.4 | 100.0     |
| 0°-180°   | 32323.4 | 100.0     |

**Coefficient of Utilization**



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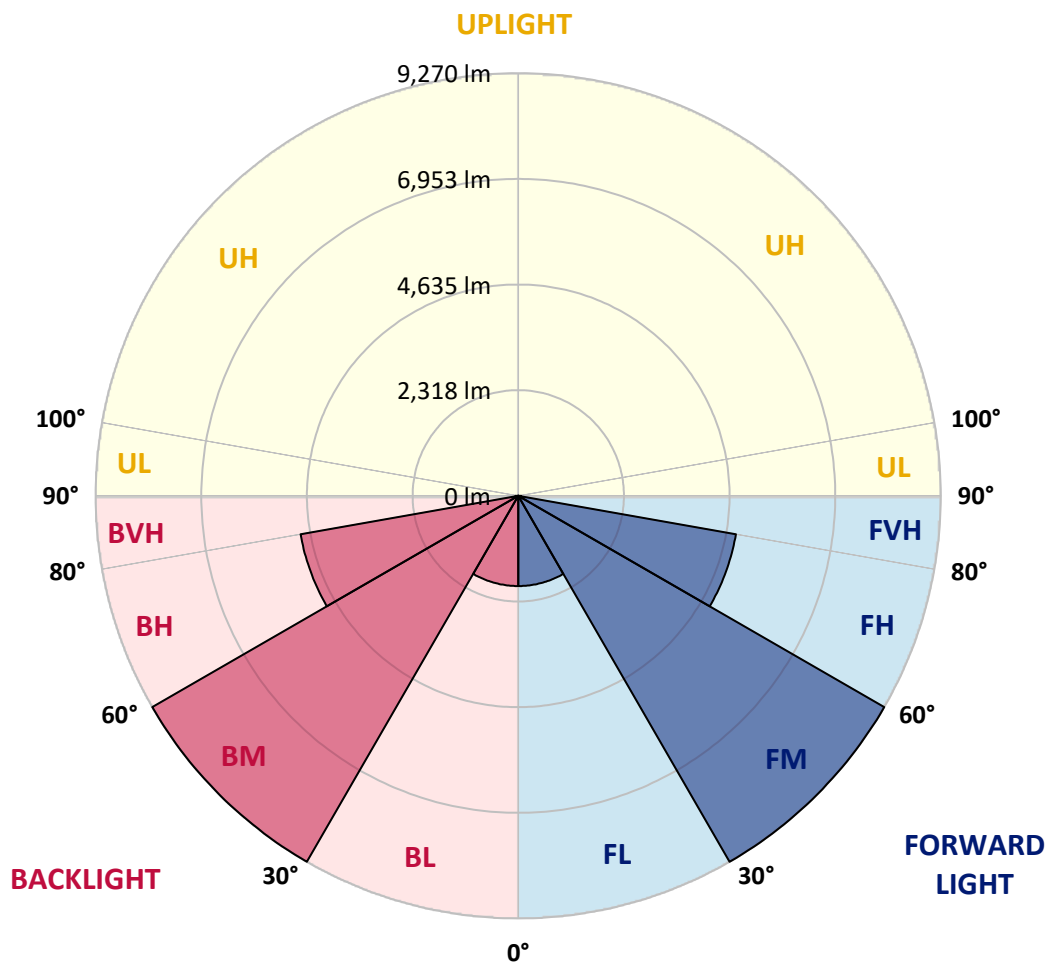
CATALOG NUMBER: NAV-SB5B-740-U-5NQ

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1978.7 | 6.1       |                         |      |         |
| FM   | (30°-60°)   | 9270.5 | 28.7      |                         |      |         |
| FH   | (60°-80°)   | 4849.0 | 15.0      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 63.5   | 0.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 1978.7 | 6.1       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 9270.5 | 28.7      | B5                      |      |         |
| BH   | (60°-80°)   | 4849.0 | 15.0      | B4/5000                 |      | G2/5000 |
| BVH  | (80°-90°)   | 63.5   | 0.2       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B5-U0-G2**

Type V Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°    | 85°    | 90°    |
|-------|--------|--------|---------|---------|---------|---------|---------|---------|--------|--------|--------|
| 0°    | 3846.8 | 3846.8 | 3846.8  | 3846.8  | 3846.8  | 3846.8  | 3846.8  | 3846.8  | 3846.8 | 3846.8 | 3846.8 |
| 2.5°  | 3872.8 | 3859.7 | 3869.5  | 3861.4  | 3854.9  | 3848.5  | 3851.6  | 3863.0  | 3867.8 | 3869.5 | 3869.5 |
| 5°    | 3924.6 | 3913.3 | 3918.2  | 3918.2  | 3906.8  | 3903.6  | 3905.1  | 3913.3  | 3923.0 | 3923.0 | 3923.0 |
| 7.5°  | 4009.0 | 3997.6 | 4009.0  | 4002.5  | 3992.8  | 3989.5  | 3987.9  | 3994.4  | 4009.0 | 4009.0 | 4004.2 |
| 10°   | 4111.2 | 4098.2 | 4104.7  | 4101.4  | 4090.1  | 4085.2  | 4083.6  | 4093.3  | 4106.3 | 4104.7 | 4101.4 |
| 12.5° | 4223.1 | 4208.4 | 4216.5  | 4206.8  | 4203.6  | 4198.7  | 4198.7  | 4197.1  | 4205.2 | 4198.7 | 4202.0 |
| 15°   | 4347.9 | 4338.2 | 4341.5  | 4334.9  | 4339.8  | 4336.6  | 4323.6  | 4317.1  | 4320.4 | 4310.6 | 4312.3 |
| 17.5° | 4495.5 | 4472.8 | 4484.2  | 4480.9  | 4480.9  | 4487.3  | 4466.3  | 4458.2  | 4464.7 | 4455.0 | 4463.1 |
| 20°   | 4665.8 | 4643.0 | 4648.0  | 4641.5  | 4633.3  | 4639.9  | 4613.9  | 4620.4  | 4625.2 | 4618.8 | 4633.3 |
| 22.5° | 4852.2 | 4823.1 | 4821.5  | 4824.7  | 4806.8  | 4808.5  | 4790.6  | 4806.8  | 4816.6 | 4798.7 | 4816.6 |
| 25°   | 5043.6 | 5012.9 | 5034.0  | 5025.8  | 5003.1  | 5007.9  | 4995.0  | 5011.2  | 5019.3 | 4996.7 | 5022.6 |
| 27.5° | 5246.4 | 5225.3 | 5244.7  | 5249.6  | 5222.1  | 5241.5  | 5222.1  | 5236.6  | 5244.7 | 5210.7 | 5236.6 |
| 30°   | 5483.1 | 5462.1 | 5480.0  | 5492.9  | 5460.5  | 5491.2  | 5475.0  | 5484.8  | 5486.4 | 5445.8 | 5470.2 |
| 32.5° | 5741.0 | 5708.5 | 5753.9  | 5760.5  | 5724.8  | 5762.1  | 5741.0  | 5753.9  | 5762.1 | 5707.0 | 5744.3 |
| 35°   | 6055.6 | 6015.1 | 6067.0  | 6058.9  | 6028.0  | 6058.9  | 6039.4  | 6058.9  | 6078.4 | 6011.8 | 6052.4 |
| 37.5° | 6394.6 | 6352.4 | 6407.6  | 6392.9  | 6363.8  | 6384.8  | 6373.4  | 6386.5  | 6417.3 | 6346.0 | 6389.7 |
| 40°   | 6767.6 | 6715.7 | 6790.3  | 6764.4  | 6736.8  | 6733.5  | 6740.0  | 6748.1  | 6788.7 | 6709.2 | 6735.2 |
| 42.5° | 7166.5 | 7111.4 | 7223.3  | 7182.8  | 7143.8  | 7117.9  | 7138.9  | 7155.2  | 7194.1 | 7104.9 | 7151.9 |
| 45°   | 7622.2 | 7559.0 | 7704.9  | 7656.3  | 7594.6  | 7541.1  | 7575.3  | 7599.6  | 7656.3 | 7549.2 | 7604.4 |
| 47.5° | 8125.0 | 8053.6 | 8209.3  | 8194.8  | 8094.2  | 7977.4  | 8055.3  | 8125.0  | 8167.2 | 8037.4 | 8081.2 |
| 50°   | 8616.4 | 8561.2 | 8765.6  | 8783.4  | 8660.2  | 8496.4  | 8605.1  | 8710.4  | 8721.8 | 8551.5 | 8572.6 |
| 52.5° | 9077.0 | 9021.8 | 9318.6  | 9430.5  | 9320.2  | 9125.6  | 9240.8  | 9347.8  | 9261.8 | 9041.3 | 9047.8 |
| 55°   | 9445.1 | 9399.7 | 9777.6  | 10066.2 | 10103.5 | 9943.0  | 10011.1 | 10007.9 | 9725.7 | 9386.7 | 9398.1 |
| 57.5° | 9534.3 | 9527.8 | 10004.6 | 10616.0 | 11005.2 | 11024.7 | 10890.1 | 10546.3 | 9938.1 | 9482.4 | 9453.2 |
| 60°   | 9128.9 | 9169.4 | 9824.6  | 10903.0 | 11940.9 | 12372.4 | 11790.2 | 10809.0 | 9696.5 | 9064.0 | 8989.4 |
| 62.5° | 7915.8 | 8022.8 | 8812.6  | 10552.8 | 12696.8 | 13922.8 | 12511.9 | 10410.0 | 8704.0 | 7878.5 | 7829.9 |
| 65°   | 5672.9 | 5859.4 | 6731.9  | 9005.6  | 12628.6 | 15285.0 | 12408.0 | 8932.7  | 6796.8 | 5844.9 | 5775.1 |
| 67.5° | 2573.8 | 2763.5 | 3504.6  | 6165.9  | 10977.6 | 14915.3 | 10951.7 | 6230.8  | 3679.7 | 2773.2 | 2732.6 |
| 70°   | 932.5  | 964.9  | 1203.4  | 2468.3  | 7015.7  | 11884.3 | 7315.7  | 2486.1  | 1279.6 | 1028.2 | 1015.3 |
| 72.5° | 564.4  | 569.3  | 619.5   | 883.9   | 2437.4  | 7215.2  | 2541.3  | 913.1   | 632.5  | 561.1  | 570.8  |
| 75°   | 358.4  | 355.2  | 441.2   | 540.1   | 864.4   | 2434.3  | 906.6   | 540.1   | 439.5  | 400.6  | 403.8  |
| 77.5° | 257.9  | 266.0  | 316.2   | 403.8   | 544.9   | 825.4   | 535.2   | 386.0   | 316.2  | 259.5  | 264.3  |
| 80°   | 193.0  | 197.8  | 230.3   | 314.6   | 382.7   | 514.1   | 340.6   | 285.5   | 238.4  | 162.2  | 167.1  |
| 82.5° | 139.5  | 139.5  | 150.8   | 228.7   | 233.5   | 277.4   | 184.9   | 201.1   | 157.3  | 115.1  | 115.1  |
| 85°   | 82.7   | 81.1   | 94.1    | 136.2   | 121.7   | 102.2   | 84.4    | 123.2   | 98.9   | 71.3   | 69.7   |
| 87.5° | 29.2   | 30.9   | 29.2    | 38.9    | 32.4    | 27.6    | 25.9    | 34.0    | 27.6   | 24.3   | 22.8   |
| 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)