

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: P968821

Luminaire Tested: **NAV-SB5C-740-U-T3R-HSS**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P968821  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5C-740-U-T3R-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

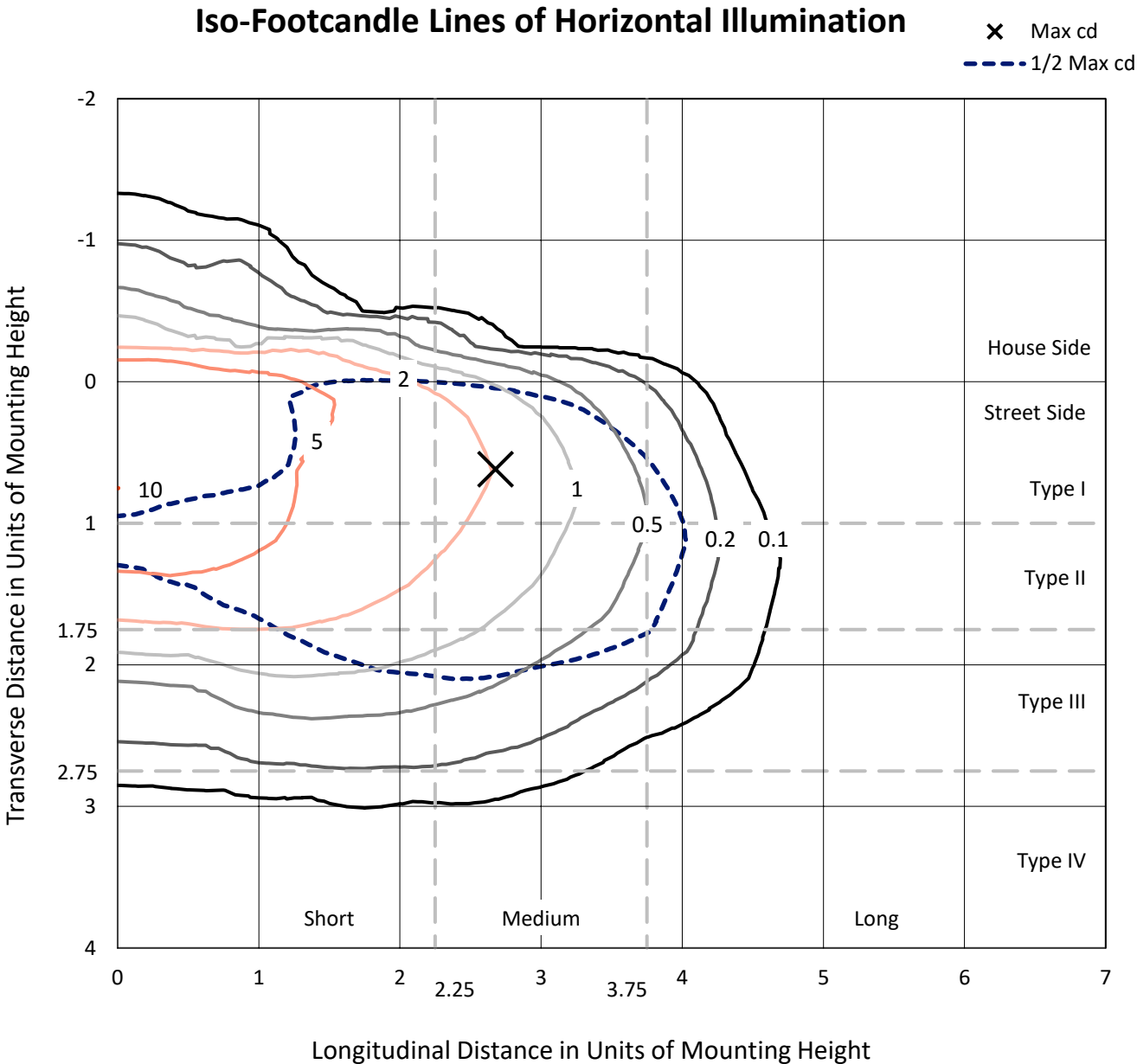
### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 34154 lumens  
Efficiency: N/A  
Efficacy: 136.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G5

Input Watts (W): 249.5  
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



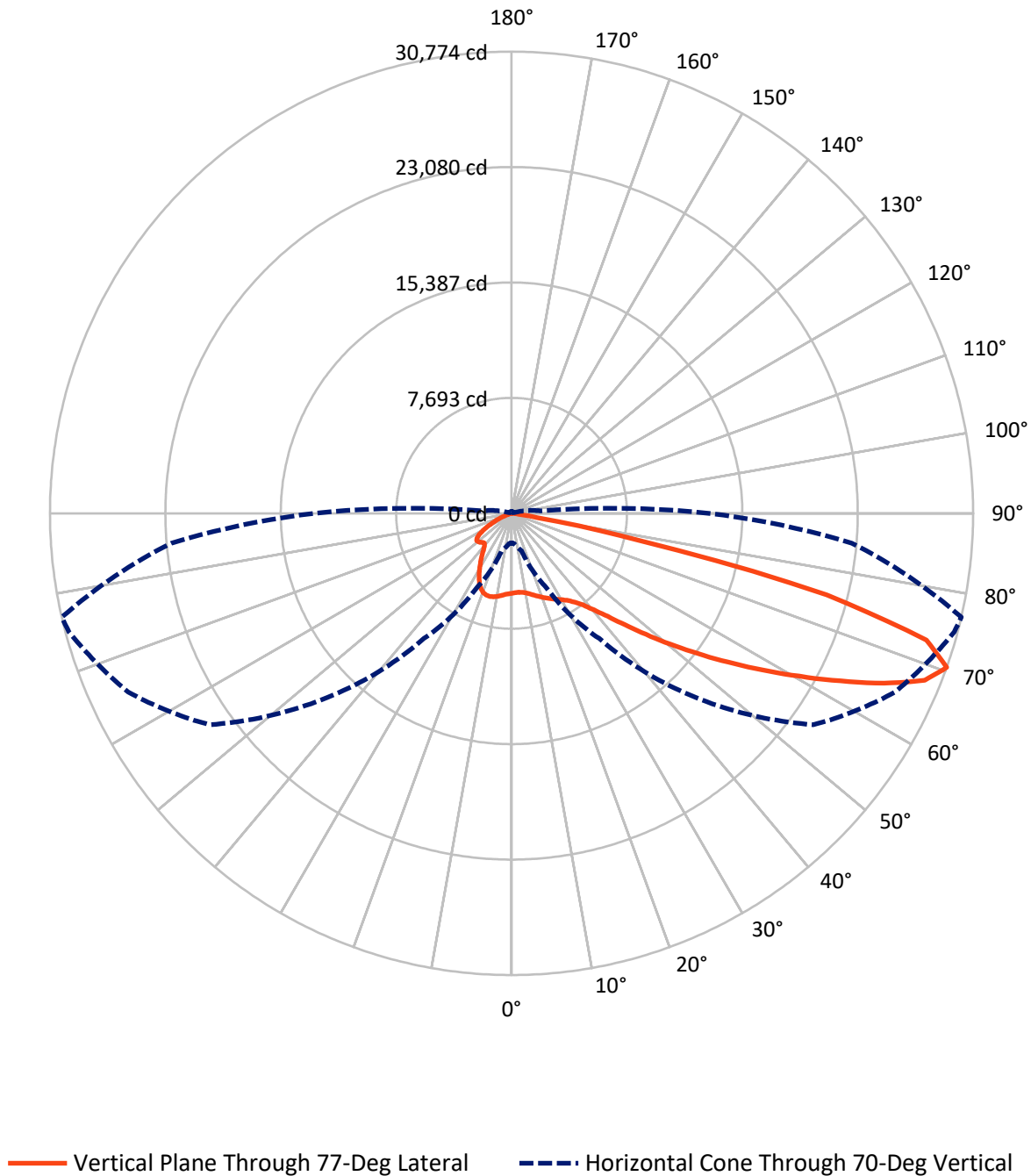
REPORT NUMBER: P968821  
CATALOG NUMBER: NAV-SB5C-740-U-T3R-HSS



Based on 25 foot mounting height. Maximum calculated value = 10 fc  
Type III - Medium - N/A

REPORT NUMBER: P968821  
CATALOG NUMBER: NAV-SB5C-740-U-T3R-HSS

## Luminous Intensity Polar Plot



REPORT NUMBER: P968821

CATALOG NUMBER: NAV-SB5C-740-U-T3R-HSS

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3600.3   | 0.0    | 3600.3  |
|                    | % Fixture | 10.5     | 0.0    | 10.5    |
| <b>Street Side</b> | Lumens    | 30553.7  | 0.0    | 30553.7 |
|                    | % Fixture | 89.5     | 0.0    | 89.5    |
| <b>Total</b>       | Lumens    | 34154.0  | 0.0    | 34154.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 459.1   | 1.3       |
| 10°-20°   | 1089.9  | 3.2       |
| 20°-30°   | 1685.8  | 4.9       |
| 30°-40°   | 3059.0  | 9.0       |
| 40°-50°   | 5774.3  | 16.9      |
| 50°-60°   | 8343.4  | 24.4      |
| 60°-70°   | 8881.3  | 26.0      |
| 70°-80°   | 4706.5  | 13.8      |
| 80°-90°   | 154.5   | 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°    | 34154.0 | 100.0     |
| 0°-180°   | 34154.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P968821

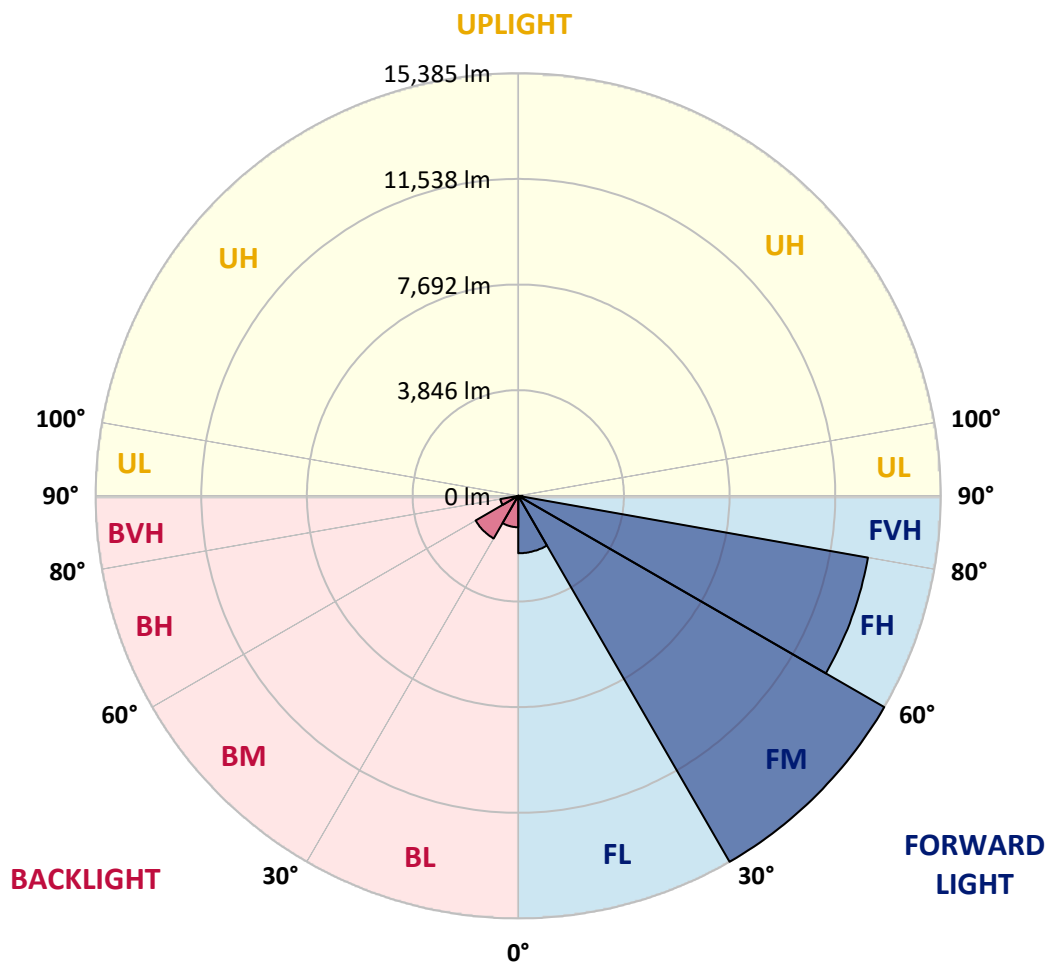
CATALOG NUMBER: NAV-SB5C-740-U-T3R-HSS

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2091.0  | 6.1       |                         |      |         |
| FM   | (30°-60°)   | 15384.5 | 45.0      |                         |      |         |
| FH   | (60°-80°)   | 12927.8 | 37.9      |                         |      | G5      |
| FVH  | (80°-90°)   | 150.4   | 0.4       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1143.9  | 3.3       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 1792.2  | 5.2       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 660.0   | 1.9       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 4.2     | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G5**

Type III Medium



REPORT NUMBER: P968821

CATALOG NUMBER: NAV-SB5C-740-U-T3R-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 77°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 5327.4  | 5327.4  | 5327.4  | 5327.4  | 5327.4  | 5327.4  | 5327.4  | 5327.4  | 5327.4  | 5327.4  | 5327.4  |
| 2.5°  | 5001.7  | 5047.0  | 5040.5  | 5070.8  | 5081.5  | 5124.7  | 5167.8  | 5226.1  | 5290.7  | 5288.6  | 5331.7  |
| 5°    | 4719.2  | 4764.5  | 4775.3  | 4816.3  | 4868.0  | 4934.9  | 5023.3  | 5139.8  | 5260.5  | 5280.0  | 5366.3  |
| 7.5°  | 4384.8  | 4432.3  | 4460.4  | 4542.3  | 4637.2  | 4775.3  | 4919.8  | 5090.2  | 5290.7  | 5318.8  | 5484.9  |
| 10°   | 4050.6  | 4093.6  | 4130.3  | 4246.8  | 4397.8  | 4602.7  | 4837.8  | 5083.7  | 5353.3  | 5394.3  | 5629.4  |
| 12.5° | 3843.5  | 3884.4  | 3925.4  | 4026.8  | 4214.5  | 4464.7  | 4783.9  | 5113.9  | 5456.8  | 5515.0  | 5825.7  |
| 15°   | 3770.2  | 3806.8  | 3839.1  | 3929.7  | 4104.5  | 4389.2  | 4773.1  | 5176.5  | 5588.4  | 5666.0  | 6062.9  |
| 17.5° | 3780.9  | 3800.4  | 3821.9  | 3890.9  | 4061.4  | 4354.7  | 4792.5  | 5284.3  | 5743.7  | 5812.7  | 6300.2  |
| 20°   | 3843.5  | 3854.3  | 3856.5  | 3903.9  | 4054.9  | 4350.4  | 4831.3  | 5387.8  | 5890.4  | 5983.1  | 6535.2  |
| 22.5° | 3923.3  | 3927.6  | 3923.3  | 3955.7  | 4095.9  | 4382.7  | 4883.1  | 5512.9  | 6054.3  | 6140.6  | 6772.5  |
| 25°   | 4296.4  | 4214.5  | 4111.0  | 4048.4  | 4164.9  | 4445.2  | 4960.8  | 5681.2  | 6233.3  | 6317.4  | 7003.3  |
| 27.5° | 5454.6  | 5219.6  | 4848.6  | 4432.3  | 4307.3  | 4535.8  | 5068.6  | 5851.5  | 6414.4  | 6490.0  | 7251.4  |
| 30°   | 7335.4  | 7027.0  | 6397.2  | 5458.9  | 4764.5  | 4725.7  | 5208.7  | 6021.9  | 6606.4  | 6688.4  | 7516.6  |
| 32.5° | 9220.5  | 9145.0  | 8418.2  | 7119.8  | 5793.3  | 5148.4  | 5441.7  | 6252.7  | 6860.9  | 6925.6  | 7874.7  |
| 35°   | 11127.2 | 10974.1 | 10378.7 | 9095.4  | 7378.6  | 6009.0  | 5830.0  | 6554.7  | 7195.2  | 7268.6  | 8396.6  |
| 37.5° | 12587.3 | 12494.6 | 12125.7 | 11069.0 | 9259.3  | 7337.6  | 6494.3  | 7022.7  | 7680.5  | 7762.5  | 9065.2  |
| 40°   | 13877.2 | 13834.0 | 13709.0 | 13012.3 | 11362.2 | 9076.0  | 7527.4  | 7747.4  | 8353.4  | 8450.5  | 9884.8  |
| 42.5° | 14890.9 | 14992.3 | 15063.4 | 14869.3 | 13529.9 | 11060.3 | 8916.4  | 8765.4  | 9291.7  | 9390.9  | 10928.8 |
| 45°   | 15928.3 | 15962.8 | 16249.6 | 16530.1 | 15682.4 | 13135.2 | 10482.3 | 9958.2  | 10458.6 | 10581.5 | 12179.7 |
| 47.5° | 16594.8 | 16732.8 | 17237.5 | 17731.5 | 17492.0 | 15192.9 | 12164.6 | 11366.5 | 11810.9 | 12041.7 | 13581.7 |
| 50°   | 16644.4 | 16905.3 | 17599.9 | 18460.5 | 18809.9 | 17151.2 | 13993.6 | 12971.3 | 13443.6 | 13698.1 | 15078.5 |
| 52.5° | 15818.3 | 16223.8 | 17300.1 | 18559.7 | 19521.6 | 18809.9 | 15885.1 | 14576.0 | 15182.0 | 15514.2 | 16631.4 |
| 55°   | 12127.9 | 12658.5 | 16172.0 | 18020.4 | 19549.6 | 20067.3 | 17727.2 | 16247.5 | 17118.9 | 17494.2 | 18309.5 |
| 57.5° | 10566.4 | 10833.8 | 12714.6 | 17084.4 | 19029.8 | 20574.2 | 19392.2 | 17839.3 | 19226.1 | 19692.0 | 19894.7 |
| 60°   | 8791.3  | 9142.9  | 10663.5 | 15553.0 | 18324.5 | 20623.7 | 20863.2 | 19892.6 | 21510.2 | 22034.3 | 21348.5 |
| 62.5° | 5974.4  | 6356.2  | 7868.2  | 12921.7 | 17360.4 | 20600.0 | 22068.9 | 22006.3 | 24048.9 | 24611.8 | 22580.0 |
| 65°   | 3701.2  | 3940.5  | 4937.0  | 10551.2 | 16012.4 | 20626.0 | 23330.6 | 24572.9 | 26727.6 | 27299.2 | 23533.4 |
| 67.5° | 2924.7  | 3034.7  | 3554.5  | 8101.1  | 13689.5 | 20043.6 | 24590.2 | 26986.5 | 29249.0 | 29701.9 | 23824.5 |
| 70°   | 1964.9  | 2031.8  | 2586.1  | 5431.0  | 10184.6 | 17356.1 | 24566.5 | 28198.6 | 30547.5 | 30773.9 | 22763.4 |
| 72.5° | 1035.2  | 1087.0  | 1512.0  | 2514.8  | 6151.3  | 12337.2 | 20707.9 | 26749.2 | 29255.4 | 28914.6 | 19457.0 |
| 75°   | 517.6   | 603.9   | 1018.0  | 1276.8  | 2627.1  | 6880.3  | 12859.1 | 21089.7 | 23026.5 | 21706.5 | 12483.8 |
| 77.5° | 392.6   | 474.5   | 841.2   | 841.2   | 914.5   | 2316.5  | 5446.0  | 11502.4 | 10609.6 | 8834.5  | 3664.5  |
| 80°   | 250.2   | 323.5   | 735.4   | 636.3   | 381.8   | 588.9   | 1419.2  | 3222.3  | 2253.9  | 1714.7  | 666.5   |
| 82.5° | 146.7   | 211.4   | 612.5   | 420.6   | 213.5   | 217.8   | 401.2   | 685.8   | 584.5   | 455.1   | 204.9   |
| 85°   | 58.2    | 138.1   | 420.6   | 166.0   | 84.2    | 53.9    | 120.7   | 146.7   | 120.7   | 90.6    | 51.8    |
| 87.5° | 0.0     | 32.4    | 73.3    | 0.0     | 6.5     | 4.3     | 8.6     | 10.8    | 10.8    | 8.6     | 17.2    |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

REPORT NUMBER: P968821

CATALOG NUMBER: NAV-SB5C-740-U-T3R-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5327.4  | 5327.4 | 5327.4 | 5327.4 | 5327.4 | 5327.4 | 5327.4 | 5327.4 | 5327.4 | 5327.4 | 5327.4 |
| 2.5°  | 5351.1  | 5355.4 | 5368.4 | 5370.6 | 5340.4 | 5301.5 | 5286.4 | 5280.0 | 5254.0 | 5251.9 | 5256.2 |
| 5°    | 5415.8  | 5435.3 | 5415.8 | 5359.7 | 5226.1 | 5038.4 | 4896.0 | 4779.6 | 4673.9 | 4641.5 | 4622.1 |
| 7.5°  | 5545.2  | 5564.6 | 5506.4 | 5286.4 | 4949.9 | 4576.8 | 4240.3 | 4003.1 | 3789.6 | 3709.8 | 3677.4 |
| 10°   | 5730.8  | 5756.6 | 5573.3 | 5129.0 | 4533.7 | 3934.1 | 3364.7 | 2963.5 | 2650.8 | 2523.5 | 2469.6 |
| 12.5° | 5963.7  | 5974.4 | 5609.9 | 4889.6 | 3992.3 | 3136.1 | 2329.4 | 1900.1 | 1622.0 | 1518.4 | 1486.0 |
| 15°   | 6220.3  | 6205.2 | 5614.2 | 4563.9 | 3254.7 | 2217.3 | 1520.6 | 1248.9 | 1136.6 | 1102.2 | 1102.2 |
| 17.5° | 6490.0  | 6427.4 | 5528.0 | 4093.6 | 2445.9 | 1516.3 | 1128.0 | 1063.3 | 1044.0 | 1035.2 | 1033.1 |
| 20°   | 6755.3  | 6615.0 | 5370.6 | 3479.0 | 1755.7 | 1132.3 | 1024.5 | 1005.1 | 994.4  | 989.9  | 985.6  |
| 22.5° | 6996.9  | 6757.4 | 5100.9 | 2765.0 | 1274.7 | 1000.8 | 968.4  | 951.2  | 931.7  | 923.1  | 921.0  |
| 25°   | 7231.9  | 6839.3 | 4721.4 | 2098.6 | 1020.2 | 936.0  | 910.2  | 877.8  | 852.0  | 841.2  | 836.8  |
| 27.5° | 7460.6  | 6891.1 | 4246.8 | 1553.0 | 910.2  | 875.7  | 828.2  | 782.9  | 763.5  | 759.2  | 754.9  |
| 30°   | 7704.2  | 6908.4 | 3707.6 | 1158.2 | 843.4  | 800.2  | 731.1  | 679.4  | 668.6  | 670.8  | 670.8  |
| 32.5° | 8001.9  | 6934.2 | 3164.1 | 949.0  | 787.2  | 709.6  | 627.6  | 573.7  | 565.1  | 573.7  | 571.5  |
| 35°   | 8357.7  | 6986.0 | 2640.0 | 873.5  | 737.7  | 616.8  | 528.4  | 483.1  | 474.5  | 480.9  | 478.8  |
| 37.5° | 8840.9  | 7070.1 | 2150.3 | 858.4  | 696.7  | 539.3  | 444.3  | 407.6  | 407.6  | 409.8  | 407.6  |
| 40°   | 9483.6  | 7294.4 | 1712.6 | 847.7  | 675.1  | 480.9  | 375.3  | 360.2  | 366.6  | 370.9  | 370.9  |
| 42.5° | 10266.6 | 7771.1 | 1417.1 | 834.7  | 651.4  | 455.1  | 340.8  | 334.4  | 345.1  | 349.4  | 349.4  |
| 45°   | 11144.4 | 8375.1 | 1313.5 | 813.1  | 629.8  | 472.3  | 325.6  | 317.0  | 329.9  | 332.2  | 334.4  |
| 47.5° | 12052.5 | 8966.0 | 1300.6 | 789.5  | 608.2  | 498.3  | 321.3  | 302.0  | 317.0  | 319.2  | 321.3  |
| 50°   | 12971.3 | 9352.1 | 1313.5 | 752.8  | 573.7  | 498.3  | 323.5  | 286.9  | 299.8  | 306.3  | 308.4  |
| 52.5° | 13896.5 | 9528.9 | 1304.9 | 672.9  | 513.3  | 468.0  | 323.5  | 273.9  | 286.9  | 291.2  | 291.2  |
| 55°   | 14793.8 | 9494.5 | 1173.3 | 554.3  | 435.7  | 414.1  | 314.9  | 263.1  | 271.7  | 273.9  | 273.9  |
| 57.5° | 15503.4 | 9013.4 | 929.6  | 431.3  | 353.7  | 345.1  | 286.9  | 250.2  | 256.7  | 254.5  | 254.5  |
| 60°   | 15874.4 | 7956.6 | 664.3  | 332.2  | 278.2  | 271.7  | 252.4  | 233.0  | 237.3  | 226.4  | 224.3  |
| 62.5° | 15878.7 | 6559.0 | 444.3  | 263.1  | 222.1  | 215.7  | 215.7  | 209.2  | 204.9  | 183.4  | 176.8  |
| 65°   | 15540.1 | 5008.2 | 295.5  | 209.2  | 179.1  | 168.2  | 181.2  | 179.1  | 163.9  | 133.8  | 129.5  |
| 67.5° | 14772.2 | 3282.8 | 224.3  | 163.9  | 138.1  | 131.6  | 144.5  | 151.0  | 140.2  | 112.1  | 110.0  |
| 70°   | 13193.4 | 1911.0 | 185.5  | 127.3  | 103.5  | 97.1   | 116.4  | 129.5  | 116.4  | 90.6   | 86.3   |
| 72.5° | 10958.9 | 1030.9 | 151.0  | 94.9   | 71.1   | 64.7   | 92.8   | 105.7  | 92.8   | 66.8   | 64.7   |
| 75°   | 7111.1  | 552.2  | 116.4  | 62.5   | 36.7   | 41.0   | 69.0   | 77.7   | 64.7   | 43.2   | 38.8   |
| 77.5° | 2387.6  | 243.7  | 73.3   | 30.2   | 17.2   | 17.2   | 41.0   | 47.5   | 30.2   | 15.1   | 12.9   |
| 80°   | 532.7   | 101.4  | 30.2   | 12.9   | 6.5    | 6.5    | 8.6    | 8.6    | 4.3    | 0.0    | 0.0    |
| 82.5° | 174.7   | 41.0   | 12.9   | 4.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 66.8    | 15.1   | 4.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 25.9    | 2.2    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 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)