

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: P966162

Luminaire Tested: **NVN-SB4B-740-U-5MQ**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966162
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-20)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB4B-740-U-5MQ
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25630.1 lumens
Efficiency: N/A
Efficacy: 174.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

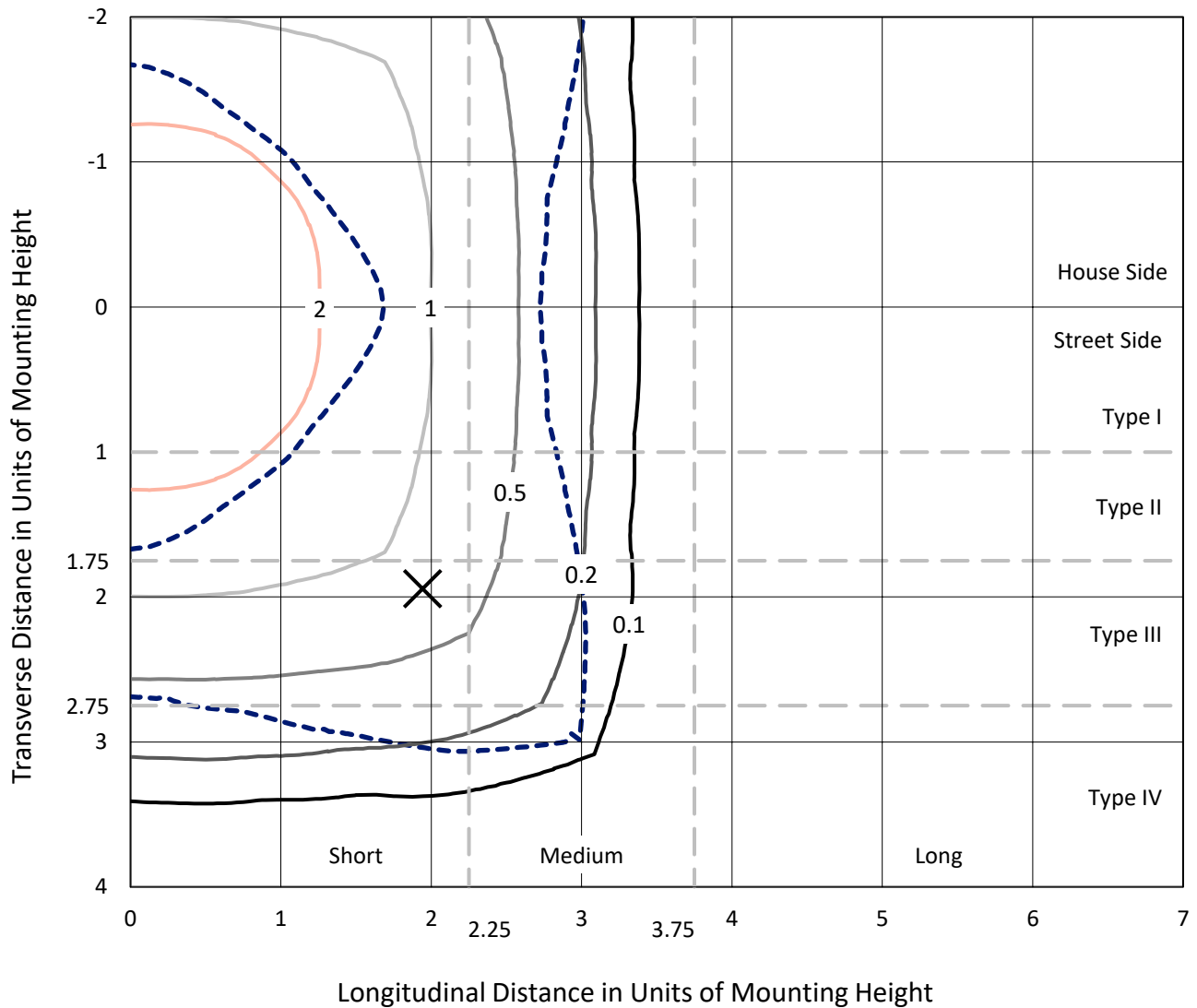
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P966162
 CATALOG NUMBER: NVN-SB4B-740-U-5MQ

Iso-Footcandle Lines of Horizontal Illumination

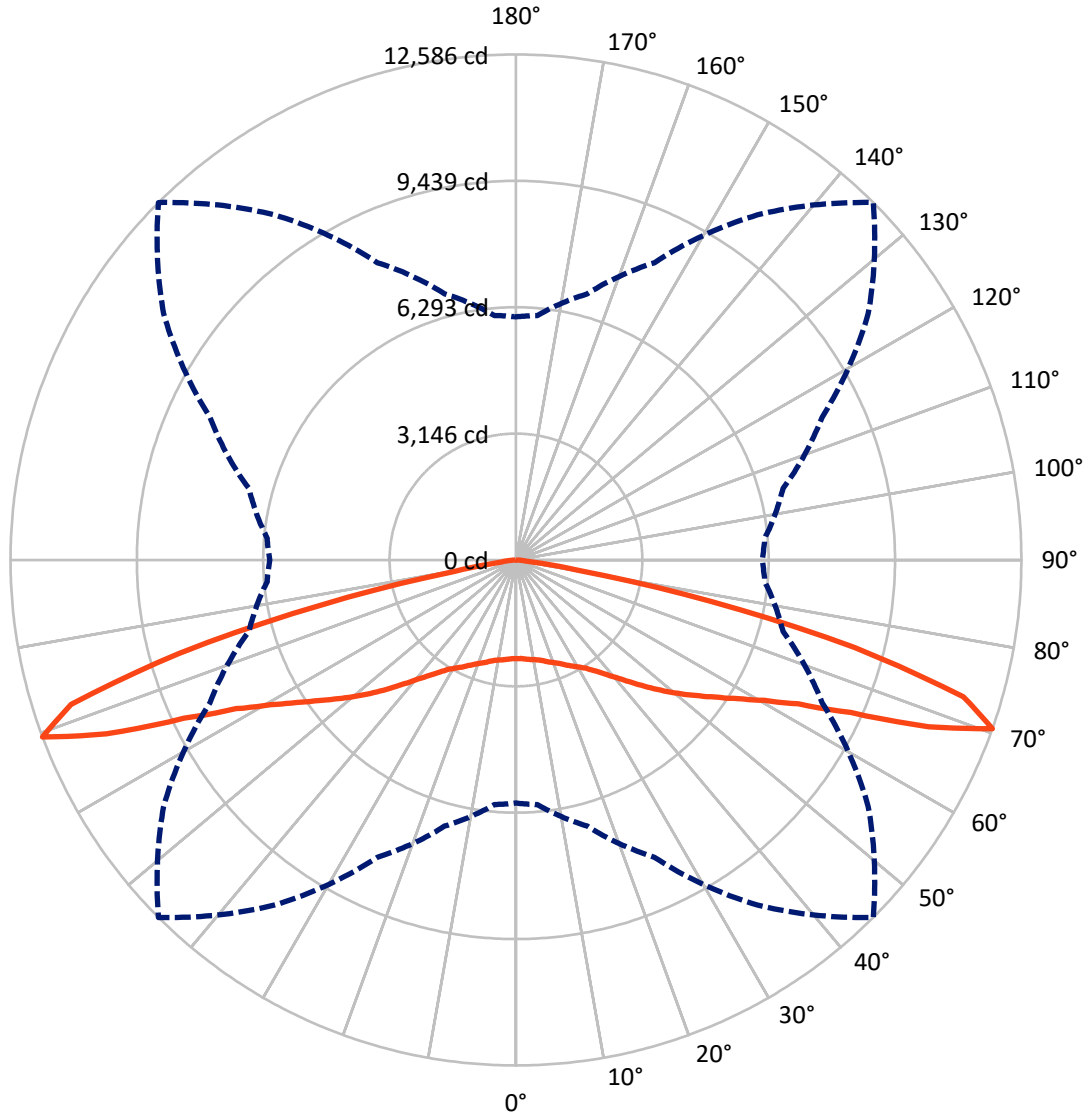
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
 Type V - Short - N/A

REPORT NUMBER: P966162
CATALOG NUMBER: NVN-SB4B-740-U-5MQ

Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P966162
 CATALOG NUMBER: NVN-SB4B-740-U-5MQ

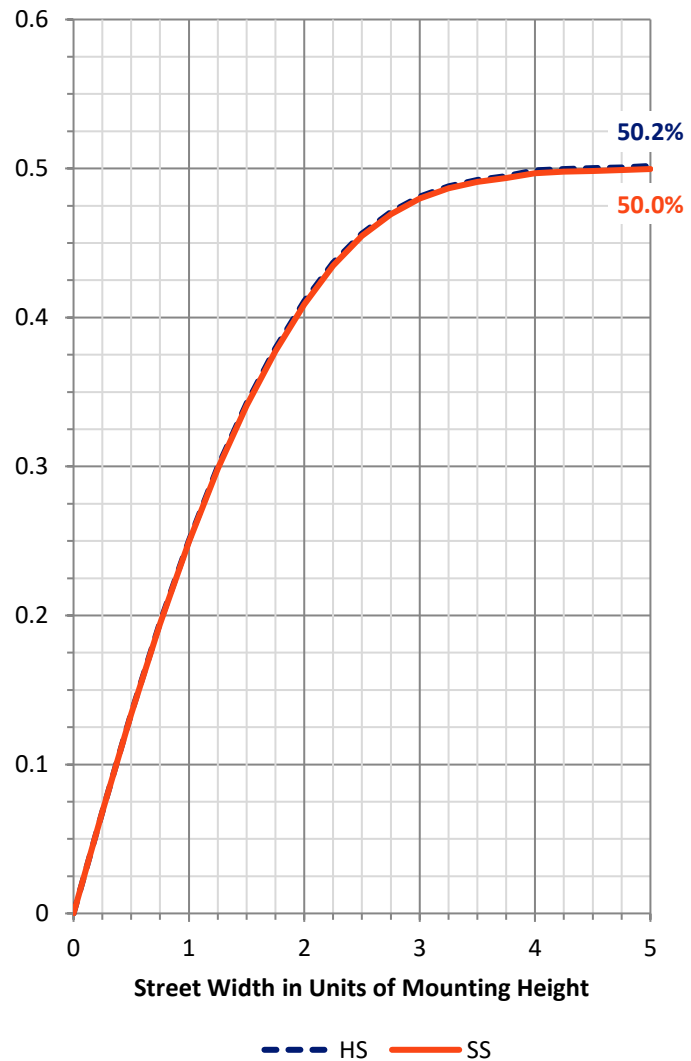
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 12815.1 | 0.0 | 12815.1 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 12815.1 | 0.0 | 12815.1 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 25630.1 | 0.0 | 25630.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 238.5 | 0.9 |
| 10°-20° | 739.6 | 2.9 |
| 20°-30° | 1321.8 | 5.2 |
| 30°-40° | 2142.5 | 8.4 |
| 40°-50° | 3489.9 | 13.6 |
| 50°-60° | 5320.9 | 20.8 |
| 60°-70° | 7915.7 | 30.9 |
| 70°-80° | 4314.3 | 16.8 |
| 80°-90° | 146.9 | 0.6 |
| 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° | 25630.1 | 100.0 |
| 0°-180° | 25630.1 | 100.0 |



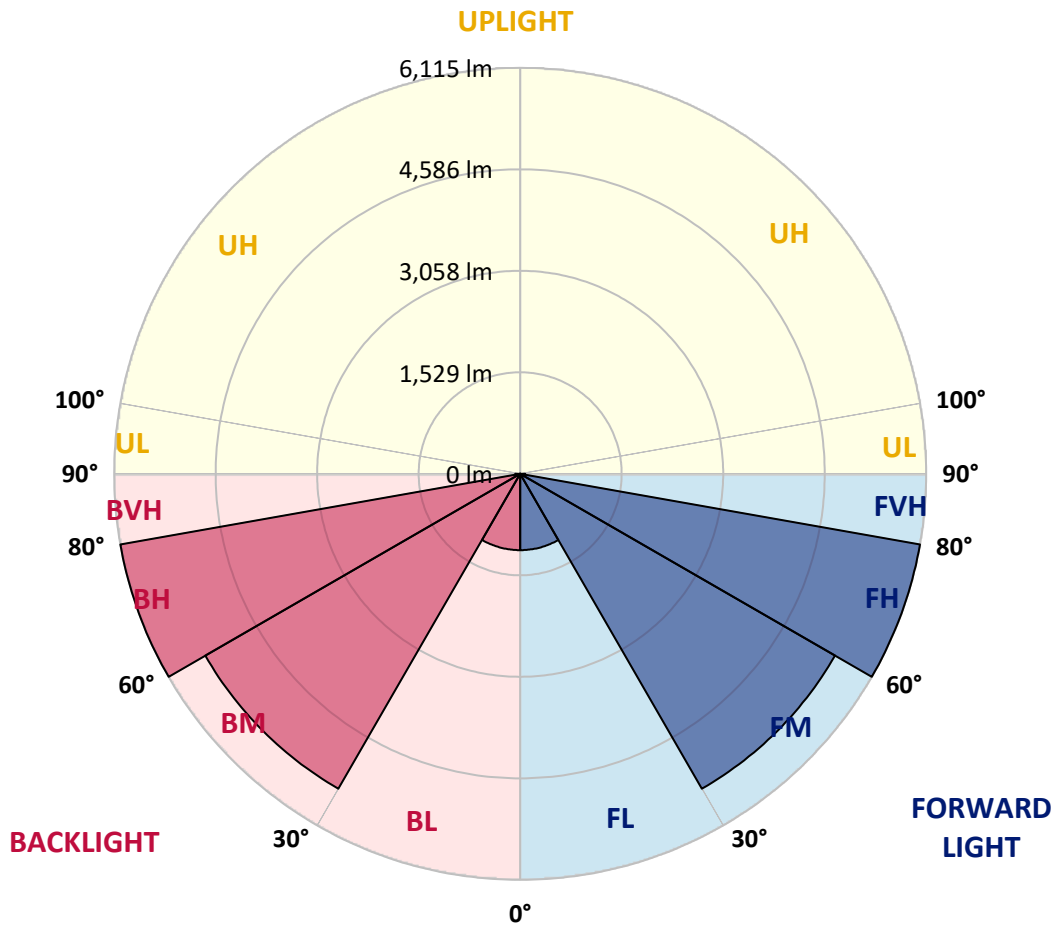
REPORT NUMBER: P966162
 CATALOG NUMBER: NVN-SB4B-740-U-5MQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1149.9 | 4.5 | | | |
| FM (30°-60°) | 5476.6 | 21.4 | | | |
| FH (60°-80°) | 6115.0 | 23.9 | | | G3/7500 |
| FVH (80°-90°) | 73.5 | 0.3 | | | G1/100 |
| BL (0°-30°) | 1149.9 | 4.5 | B3/2500 | | |
| BM (30°-60°) | 5476.6 | 21.4 | B4/8500 | | |
| BH (60°-80°) | 6115.0 | 23.9 | B5 | | G3/7500 |
| BVH (80°-90°) | 73.5 | 0.3 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G3

Type V Short



REPORT NUMBER: P966162
 CATALOG NUMBER: NVN-SB4B-740-U-5MQ

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|---------|---------|---------|--------|--------|--------|--------|
| 0° | 2455.1 | 2455.1 | 2455.1 | 2455.1 | 2455.1 | 2455.1 | 2455.1 | 2455.1 | 2455.1 | 2455.1 | 2455.1 |
| 2.5° | 2466.7 | 2469.2 | 2464.1 | 2461.5 | 2459.0 | 2455.1 | 2456.4 | 2462.9 | 2468.0 | 2466.7 | 2468.0 |
| 5° | 2487.3 | 2489.8 | 2485.9 | 2484.7 | 2479.6 | 2478.2 | 2478.2 | 2484.7 | 2488.6 | 2485.9 | 2487.3 |
| 7.5° | 2510.4 | 2514.3 | 2507.9 | 2506.5 | 2504.0 | 2501.4 | 2500.2 | 2506.5 | 2510.4 | 2510.4 | 2510.4 |
| 10° | 2532.3 | 2536.2 | 2531.0 | 2527.1 | 2524.6 | 2524.6 | 2522.0 | 2527.1 | 2533.6 | 2532.3 | 2532.3 |
| 12.5° | 2555.4 | 2558.0 | 2552.9 | 2550.3 | 2550.3 | 2554.2 | 2550.3 | 2552.9 | 2558.0 | 2555.4 | 2554.2 |
| 15° | 2583.8 | 2585.0 | 2583.8 | 2587.6 | 2594.1 | 2607.0 | 2595.4 | 2592.7 | 2595.4 | 2588.9 | 2588.9 |
| 17.5° | 2622.4 | 2624.9 | 2630.0 | 2639.1 | 2648.1 | 2671.3 | 2650.6 | 2644.3 | 2644.3 | 2631.4 | 2631.4 |
| 20° | 2670.0 | 2673.8 | 2681.6 | 2697.0 | 2708.6 | 2730.5 | 2709.9 | 2700.9 | 2697.0 | 2680.3 | 2680.3 |
| 22.5° | 2720.1 | 2726.6 | 2738.2 | 2758.8 | 2779.4 | 2800.0 | 2779.4 | 2763.9 | 2752.3 | 2730.5 | 2729.2 |
| 25° | 2778.1 | 2785.7 | 2803.8 | 2837.3 | 2865.6 | 2895.2 | 2870.7 | 2839.9 | 2816.7 | 2785.7 | 2784.5 |
| 27.5° | 2860.5 | 2869.4 | 2891.3 | 2932.5 | 2968.5 | 2994.2 | 2971.1 | 2931.2 | 2899.0 | 2861.7 | 2860.5 |
| 30° | 2976.2 | 2985.2 | 3010.9 | 3054.7 | 3079.2 | 3095.9 | 3080.4 | 3049.6 | 3010.9 | 2968.5 | 2968.5 |
| 32.5° | 3125.5 | 3137.1 | 3165.4 | 3206.5 | 3211.7 | 3214.3 | 3209.2 | 3193.7 | 3165.4 | 3114.0 | 3115.2 |
| 35° | 3314.6 | 3327.6 | 3359.6 | 3393.2 | 3388.0 | 3393.2 | 3385.4 | 3380.2 | 3359.6 | 3300.5 | 3300.5 |
| 37.5° | 3546.3 | 3561.7 | 3595.2 | 3620.9 | 3608.0 | 3601.5 | 3602.9 | 3604.2 | 3592.6 | 3526.9 | 3526.9 |
| 40° | 3815.2 | 3835.8 | 3860.3 | 3887.2 | 3865.4 | 3846.1 | 3858.9 | 3869.3 | 3858.9 | 3792.0 | 3792.0 |
| 42.5° | 4091.8 | 4121.4 | 4147.2 | 4185.8 | 4167.8 | 4143.3 | 4161.3 | 4172.9 | 4151.0 | 4079.0 | 4084.1 |
| 45° | 4399.4 | 4427.7 | 4461.1 | 4519.0 | 4506.2 | 4480.5 | 4506.2 | 4508.8 | 4471.5 | 4386.5 | 4395.5 |
| 47.5° | 4717.2 | 4746.8 | 4797.0 | 4874.2 | 4869.1 | 4840.8 | 4874.2 | 4856.1 | 4808.6 | 4706.9 | 4700.4 |
| 50° | 5018.3 | 5059.5 | 5136.7 | 5244.7 | 5255.1 | 5220.3 | 5265.3 | 5230.6 | 5150.8 | 5023.4 | 5020.9 |
| 52.5° | 5301.4 | 5345.2 | 5467.3 | 5614.0 | 5651.3 | 5606.3 | 5666.8 | 5606.3 | 5486.6 | 5323.2 | 5307.8 |
| 55° | 5598.7 | 5647.5 | 5792.9 | 5984.7 | 6059.3 | 6025.8 | 6082.5 | 5991.0 | 5821.2 | 5623.0 | 5596.0 |
| 57.5° | 5948.6 | 5978.2 | 6151.9 | 6379.7 | 6505.8 | 6513.5 | 6539.2 | 6384.8 | 6178.9 | 5953.7 | 5922.9 |
| 60° | 6328.1 | 6369.3 | 6558.6 | 6831.3 | 7030.8 | 7095.0 | 7068.1 | 6839.0 | 6599.7 | 6341.1 | 6299.9 |
| 62.5° | 6814.6 | 6859.6 | 7086.0 | 7412.9 | 7728.2 | 7887.7 | 7782.2 | 7450.2 | 7154.3 | 6844.1 | 6790.1 |
| 65° | 7217.3 | 7267.6 | 7676.7 | 8259.6 | 8833.4 | 9153.9 | 8888.8 | 8277.6 | 7744.9 | 7307.4 | 7235.4 |
| 67.5° | 6925.2 | 6987.0 | 7629.1 | 8699.7 | 10126.7 | 11082.7 | 10175.6 | 8830.9 | 7787.3 | 7194.2 | 7105.4 |
| 70° | 6052.8 | 6110.7 | 6859.6 | 8168.2 | 10490.8 | 12585.6 | 10709.5 | 8408.9 | 6884.1 | 6220.1 | 6131.3 |
| 72.5° | 4018.5 | 4205.1 | 4962.9 | 6532.7 | 9367.5 | 11646.3 | 9460.1 | 6400.2 | 4604.0 | 4009.5 | 3879.5 |
| 75° | 1333.0 | 1482.4 | 1999.6 | 3386.7 | 6274.1 | 8709.9 | 5973.1 | 2996.8 | 1583.9 | 1140.0 | 1078.3 |
| 77.5° | 335.8 | 387.3 | 534.0 | 968.9 | 2502.7 | 4959.1 | 2253.1 | 791.3 | 431.0 | 301.1 | 269.0 |
| 80° | 163.4 | 180.1 | 257.4 | 323.0 | 626.7 | 1576.2 | 588.0 | 303.7 | 203.3 | 157.0 | 144.1 |
| 82.5° | 90.1 | 91.3 | 145.4 | 182.8 | 232.9 | 407.8 | 241.9 | 177.5 | 117.1 | 95.2 | 95.2 |
| 85° | 55.4 | 54.0 | 77.2 | 97.8 | 97.8 | 145.4 | 115.8 | 97.8 | 66.9 | 59.1 | 61.8 |
| 87.5° | 21.8 | 21.8 | 28.3 | 30.9 | 27.1 | 37.3 | 29.6 | 32.2 | 25.7 | 24.5 | 25.7 |
| 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)