

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: P883481

Luminaire Tested: **NVN-SB3D-830-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P883481
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: NVN-SB3D-830-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26397 lumens
Efficiency: N/A
Efficacy: 121.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

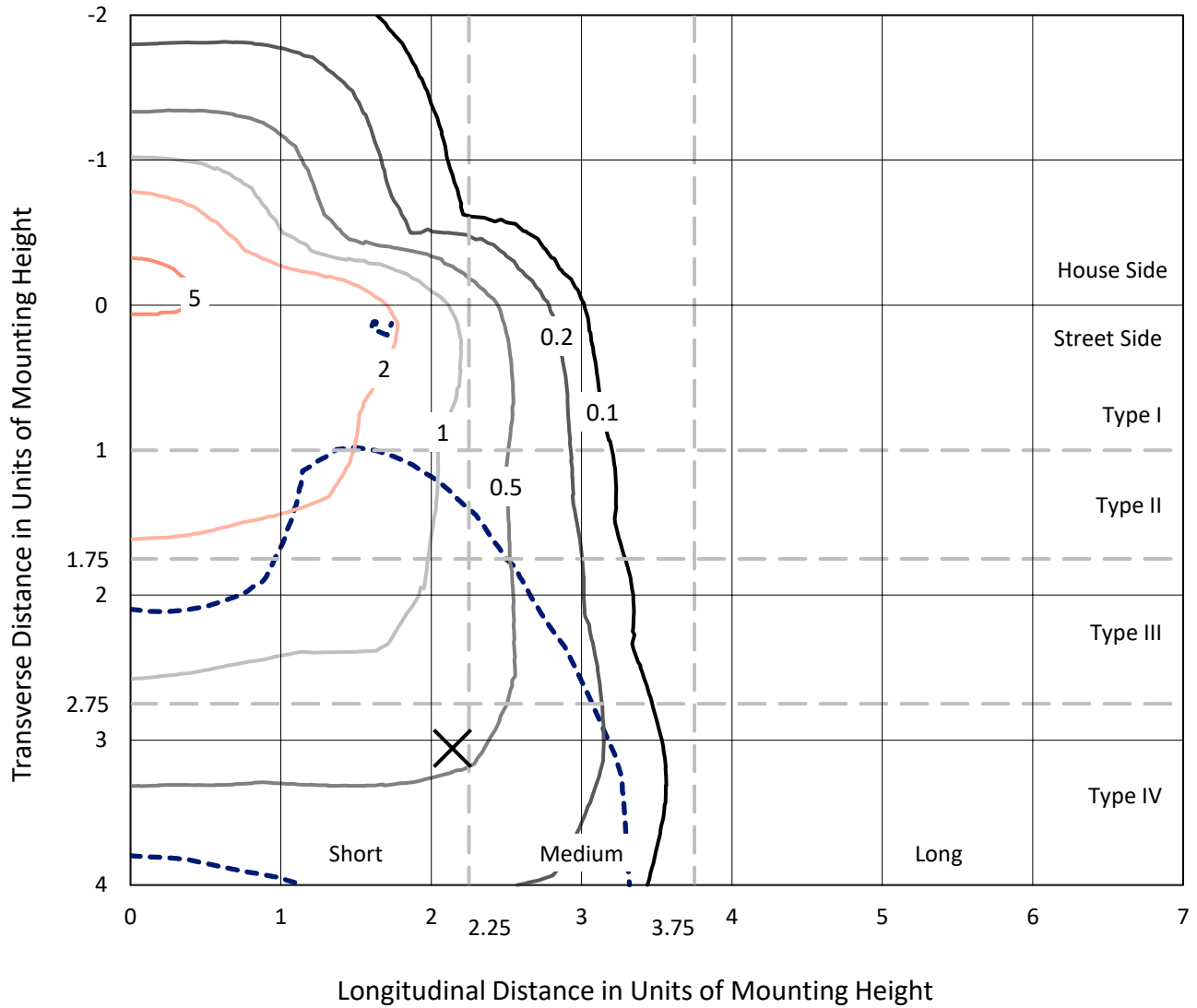
Input Watts (W): 218.1
Input Voltage (V): 120.0
Input Current (Ain): 1.84
Voltage Rise (V): NR
Power Factor: 0.998
Total Harmonic Distortion (THDi): 2.542
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

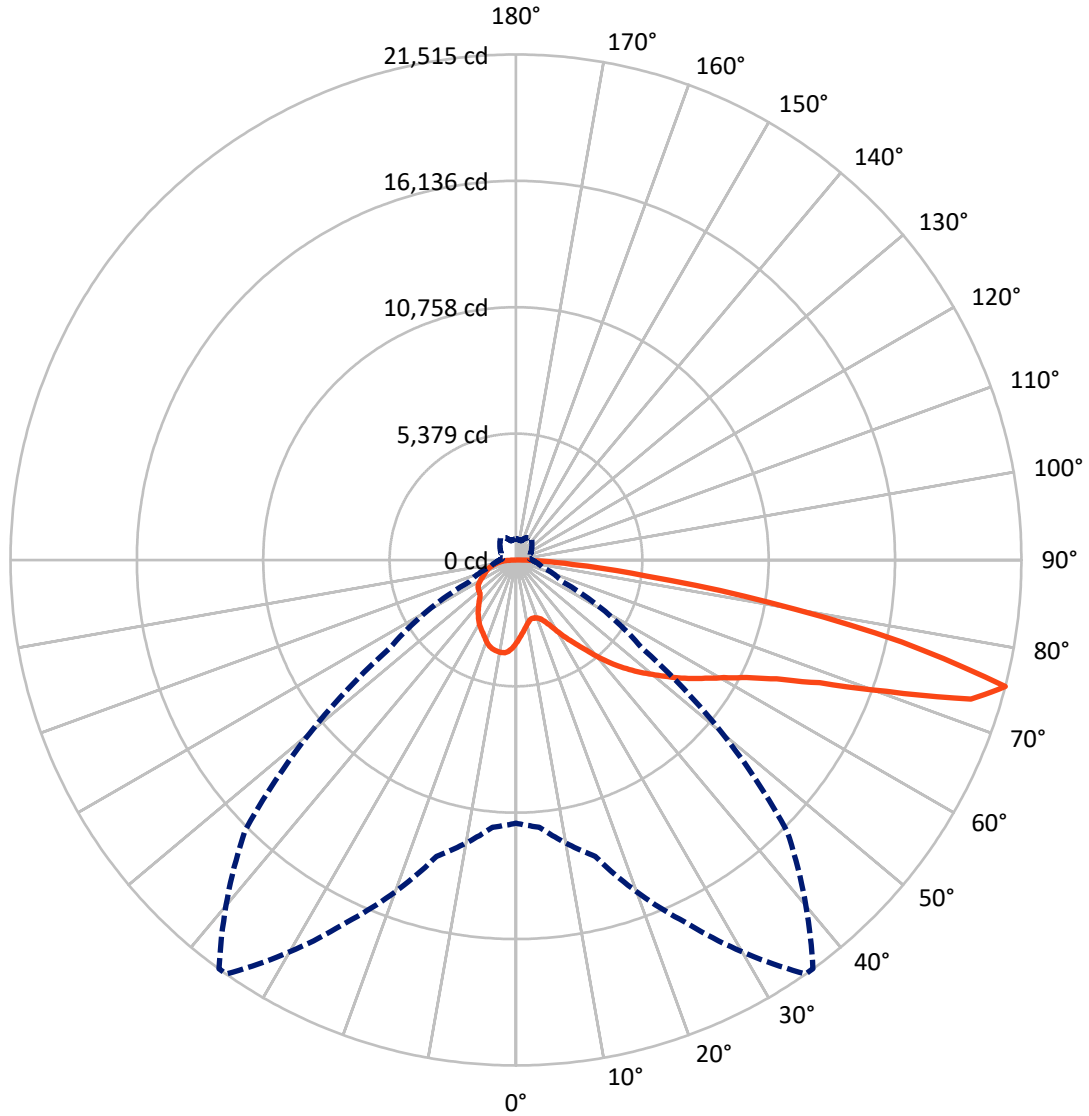
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 6281.8 | 0.0 | 6281.8 |
| | % Fixture | 23.8 | 0.0 | 23.8 |
| Street Side | Lumens | 20115.2 | 0.0 | 20115.2 |
| | % Fixture | 76.2 | 0.0 | 76.2 |
| Total | Lumens | 26397.0 | 0.0 | 26397.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 333.0 | 1.3 |
| 10°-20° | 960.6 | 3.6 |
| 20°-30° | 1613.2 | 6.1 |
| 30°-40° | 2507.1 | 9.5 |
| 40°-50° | 3721.2 | 14.1 |
| 50°-60° | 5137.3 | 19.5 |
| 60°-70° | 6232.8 | 23.6 |
| 70°-80° | 5150.9 | 19.5 |
| 80°-90° | 740.9 | 2.8 |
| 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° | 26397.0 | 100.0 |
| 0°-180° | 26397.0 | 100.0 |



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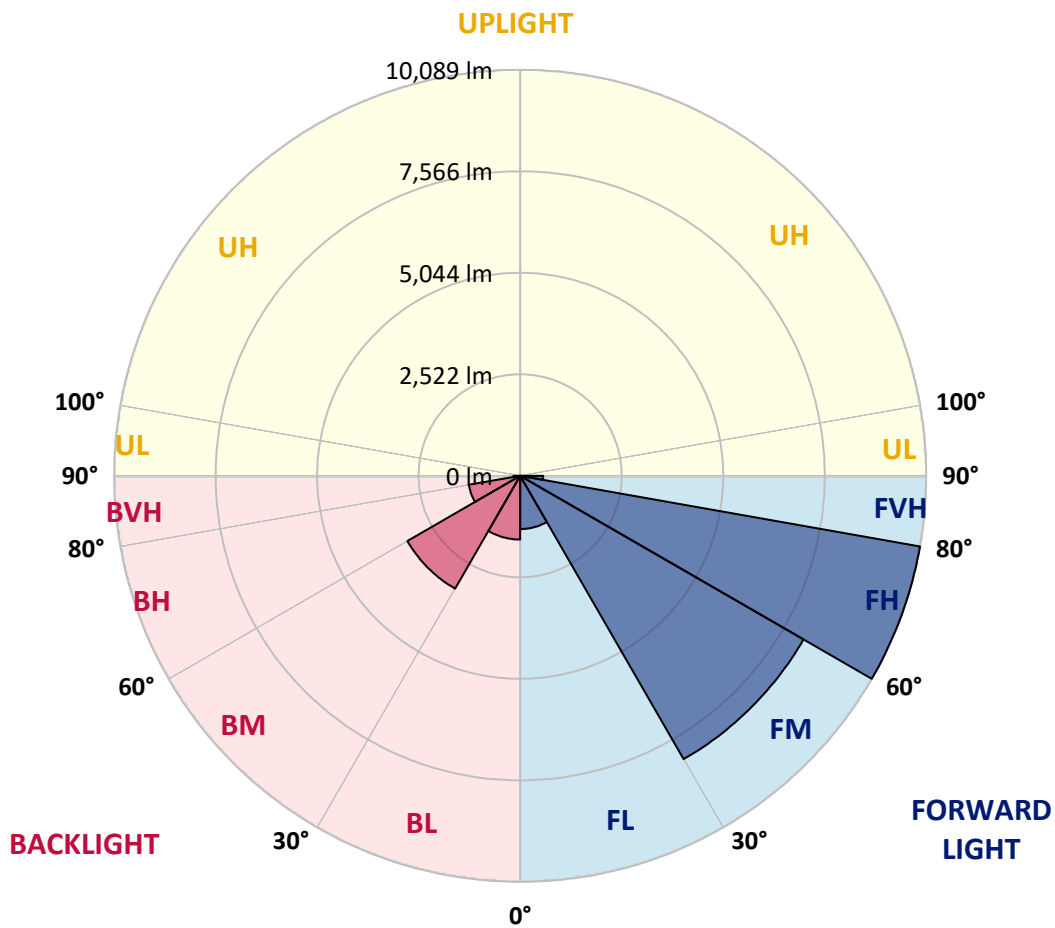
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1323.8 | 5.0 | | | |
| FM (30°-60°) | 8128.8 | 30.8 | | | |
| FH (60°-80°) | 10088.5 | 38.2 | | | G4/12000 |
| FVH (80°-90°) | 574.0 | 2.2 | | | G4/750 |
| BL (0°-30°) | 1583.1 | 6.0 | B3/2500 | | |
| BM (30°-60°) | 3236.8 | 12.3 | B3/5000 | | |
| BH (60°-80°) | 1295.1 | 4.9 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 166.8 | 0.6 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type IV Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 36° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| 0° | 3517.6 | 3517.6 | 3517.6 | 3517.6 | 3517.6 | 3517.6 | 3517.6 | 3517.6 | 3517.6 | 3517.6 | 3517.6 |
| 2.5° | 3243.6 | 3263.6 | 3272.1 | 3267.9 | 3289.3 | 3286.4 | 3316.4 | 3353.5 | 3404.8 | 3454.8 | 3527.6 |
| 5° | 2993.9 | 3015.3 | 3033.8 | 3050.9 | 3092.3 | 3105.2 | 3152.3 | 3223.6 | 3317.8 | 3413.4 | 3533.3 |
| 7.5° | 2761.3 | 2779.8 | 2808.4 | 2839.7 | 2909.7 | 2922.5 | 3001.0 | 3112.3 | 3243.6 | 3383.4 | 3549.0 |
| 10° | 2571.5 | 2590.0 | 2620.0 | 2655.7 | 2742.7 | 2758.4 | 2858.3 | 3006.7 | 3178.0 | 3354.9 | 3566.1 |
| 12.5° | 2490.1 | 2495.8 | 2513.0 | 2548.6 | 2624.3 | 2634.3 | 2744.1 | 2914.0 | 3113.7 | 3333.5 | 3591.8 |
| 15° | 2485.9 | 2497.3 | 2498.7 | 2517.2 | 2580.0 | 2584.3 | 2685.6 | 2854.0 | 3073.8 | 3329.2 | 3630.3 |
| 17.5° | 2528.7 | 2537.2 | 2524.4 | 2535.8 | 2588.6 | 2595.7 | 2675.6 | 2825.5 | 3060.9 | 3347.8 | 3696.0 |
| 20° | 2642.8 | 2650.0 | 2611.4 | 2595.7 | 2634.3 | 2640.0 | 2718.5 | 2844.0 | 3073.8 | 3386.3 | 3785.9 |
| 22.5° | 2885.4 | 2889.7 | 2795.5 | 2731.3 | 2734.2 | 2737.0 | 2805.5 | 2919.7 | 3123.7 | 3456.2 | 3900.0 |
| 25° | 3263.6 | 3260.7 | 3110.9 | 2986.7 | 2915.4 | 2899.7 | 2945.3 | 3042.4 | 3207.9 | 3549.0 | 4047.0 |
| 27.5° | 3705.9 | 3684.5 | 3534.7 | 3349.2 | 3193.6 | 3170.8 | 3160.8 | 3202.2 | 3327.8 | 3671.7 | 4226.8 |
| 30° | 4205.4 | 4185.4 | 4024.2 | 3781.6 | 3566.1 | 3529.0 | 3434.8 | 3413.4 | 3506.2 | 3838.7 | 4476.5 |
| 32.5° | 4753.4 | 4740.5 | 4547.9 | 4253.9 | 3965.7 | 3922.8 | 3764.5 | 3707.4 | 3780.1 | 4091.2 | 4824.7 |
| 35° | 5212.9 | 5201.5 | 5041.6 | 4739.1 | 4386.6 | 4333.8 | 4172.6 | 4108.4 | 4145.5 | 4415.2 | 5279.9 |
| 37.5° | 5628.1 | 5622.4 | 5485.4 | 5247.1 | 4883.2 | 4819.0 | 4637.8 | 4616.4 | 4609.2 | 4841.8 | 5832.2 |
| 40° | 6013.4 | 5999.1 | 5856.4 | 5730.9 | 5461.2 | 5402.7 | 5242.8 | 5224.3 | 5170.1 | 5367.0 | 6457.2 |
| 42.5° | 6440.1 | 6403.0 | 6196.1 | 6137.6 | 6064.8 | 6016.3 | 5920.7 | 5923.5 | 5803.6 | 5959.2 | 7119.4 |
| 45° | 6788.3 | 6766.9 | 6554.3 | 6520.0 | 6598.5 | 6578.5 | 6661.3 | 6682.7 | 6450.1 | 6579.9 | 7807.2 |
| 47.5° | 7162.2 | 7142.2 | 6962.4 | 6938.1 | 7150.7 | 7156.5 | 7449.0 | 7456.1 | 7080.8 | 7224.9 | 8496.4 |
| 50° | 7623.1 | 7594.5 | 7416.2 | 7446.1 | 7684.4 | 7705.9 | 8241.0 | 8192.5 | 7661.6 | 7879.9 | 9180.0 |
| 52.5° | 7927.0 | 7944.2 | 7905.6 | 7954.2 | 8279.5 | 8299.5 | 9020.1 | 8896.0 | 8236.7 | 8526.4 | 9850.6 |
| 55° | 8151.1 | 8185.3 | 8305.2 | 8416.5 | 8907.4 | 8927.4 | 9755.0 | 9565.2 | 8713.3 | 9125.7 | 10481.4 |
| 57.5° | 8439.3 | 8390.8 | 8614.9 | 8831.8 | 9503.9 | 9556.7 | 10470.0 | 10210.3 | 9135.7 | 9642.3 | 10913.8 |
| 60° | 8853.2 | 8818.9 | 8993.0 | 9314.1 | 10171.7 | 10255.9 | 11226.3 | 10791.0 | 9445.4 | 10051.9 | 10998.0 |
| 62.5° | 9692.2 | 9606.6 | 9633.7 | 9917.7 | 11013.7 | 11125.0 | 12079.6 | 11297.6 | 9599.5 | 10211.7 | 10547.0 |
| 65° | 10946.6 | 10799.6 | 10662.6 | 10859.5 | 12199.5 | 12309.4 | 13042.9 | 11695.8 | 9542.4 | 9902.0 | 9349.8 |
| 67.5° | 12526.3 | 12380.7 | 12212.3 | 12397.9 | 13946.2 | 14033.2 | 14231.6 | 11919.8 | 9092.9 | 8709.0 | 7233.5 |
| 70° | 13829.2 | 13774.9 | 13976.1 | 14739.6 | 16736.0 | 16738.8 | 15755.6 | 11734.3 | 7861.4 | 6174.7 | 4185.4 |
| 72.5° | 13656.5 | 13623.7 | 14683.9 | 17044.2 | 20252.1 | 20176.5 | 17198.3 | 10330.1 | 5295.6 | 2785.5 | 1568.3 |
| 75° | 11203.5 | 11416.1 | 13058.6 | 17002.8 | 21515.0 | 21505.0 | 16315.0 | 6567.1 | 2190.5 | 1154.5 | 810.5 |
| 77.5° | 6007.7 | 6344.5 | 8477.9 | 12553.4 | 16795.9 | 17048.5 | 11470.3 | 2297.5 | 940.4 | 739.2 | 560.8 |
| 80° | 1959.3 | 2253.2 | 3379.2 | 6391.6 | 10913.8 | 10866.7 | 4916.0 | 901.9 | 643.6 | 523.7 | 388.1 |
| 82.5° | 831.9 | 866.2 | 1509.8 | 3018.1 | 5601.0 | 5514.0 | 1565.4 | 518.0 | 452.4 | 358.2 | 239.7 |
| 85° | 325.4 | 363.9 | 666.4 | 1395.6 | 2425.9 | 2373.1 | 565.1 | 256.9 | 289.7 | 234.0 | 142.7 |
| 87.5° | 107.0 | 129.9 | 238.3 | 478.0 | 754.9 | 727.8 | 138.4 | 88.5 | 125.6 | 107.0 | 51.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3517.6 | 3517.6 | 3517.6 | 3517.6 | 3517.6 | 3517.6 | 3517.6 | 3517.6 | 3517.6 | 3517.6 | 3517.6 |
| 2.5° | 3547.5 | 3570.4 | 3597.5 | 3637.4 | 3671.7 | 3700.2 | 3730.2 | 3748.8 | 3755.9 | 3777.3 | 3775.9 |
| 5° | 3573.2 | 3623.2 | 3690.2 | 3755.9 | 3820.1 | 3858.6 | 3892.9 | 3910.0 | 3925.7 | 3937.1 | 3940.0 |
| 7.5° | 3616.0 | 3680.3 | 3785.9 | 3871.5 | 3925.7 | 3957.1 | 3979.9 | 3974.2 | 3979.9 | 3982.8 | 3987.1 |
| 10° | 3653.1 | 3743.0 | 3868.6 | 3950.0 | 3991.3 | 3992.8 | 3987.1 | 3967.1 | 3957.1 | 3958.5 | 3961.4 |
| 12.5° | 3697.4 | 3797.3 | 3932.8 | 4001.3 | 4012.8 | 3981.4 | 3957.1 | 3922.8 | 3910.0 | 3904.3 | 3901.4 |
| 15° | 3757.3 | 3871.5 | 4002.8 | 4028.4 | 3999.9 | 3960.0 | 3918.6 | 3862.9 | 3834.4 | 3811.5 | 3818.7 |
| 17.5° | 3830.1 | 3955.7 | 4057.0 | 4038.4 | 3977.1 | 3911.4 | 3844.4 | 3760.2 | 3701.7 | 3677.4 | 3678.8 |
| 20° | 3931.4 | 4044.1 | 4098.4 | 4017.0 | 3924.3 | 3824.4 | 3710.2 | 3607.5 | 3553.3 | 3529.0 | 3526.1 |
| 22.5° | 4054.1 | 4162.6 | 4138.3 | 3979.9 | 3848.6 | 3688.8 | 3546.1 | 3470.5 | 3443.4 | 3426.3 | 3429.1 |
| 25° | 4201.1 | 4293.9 | 4166.9 | 3925.7 | 3724.5 | 3509.0 | 3399.1 | 3374.9 | 3362.0 | 3349.2 | 3349.2 |
| 27.5° | 4392.3 | 4442.3 | 4188.3 | 3845.8 | 3530.4 | 3317.8 | 3277.8 | 3282.1 | 3277.8 | 3256.4 | 3260.7 |
| 30° | 4644.9 | 4634.9 | 4208.3 | 3715.9 | 3307.8 | 3145.1 | 3148.0 | 3166.5 | 3169.4 | 3155.1 | 3162.3 |
| 32.5° | 4977.4 | 4876.1 | 4218.2 | 3547.5 | 3095.2 | 2993.9 | 2996.7 | 3016.7 | 3031.0 | 3006.7 | 3018.1 |
| 35° | 5379.8 | 5157.2 | 4202.5 | 3336.3 | 2931.1 | 2849.7 | 2828.3 | 2834.0 | 2838.3 | 2815.5 | 2831.2 |
| 37.5° | 5849.3 | 5472.6 | 4132.6 | 3102.3 | 2795.5 | 2708.5 | 2662.8 | 2624.3 | 2601.4 | 2580.0 | 2594.3 |
| 40° | 6364.5 | 5816.5 | 4004.2 | 2874.0 | 2644.2 | 2558.6 | 2490.1 | 2417.4 | 2340.3 | 2311.8 | 2324.6 |
| 42.5° | 6903.9 | 6170.4 | 3848.6 | 2655.7 | 2470.2 | 2400.2 | 2327.5 | 2221.9 | 2106.3 | 2047.8 | 2054.9 |
| 45° | 7463.3 | 6532.9 | 3696.0 | 2440.2 | 2291.8 | 2261.8 | 2177.6 | 2050.6 | 1925.0 | 1850.8 | 1845.1 |
| 47.5° | 8011.2 | 6875.3 | 3471.9 | 2223.3 | 2124.8 | 2157.6 | 2092.0 | 1975.0 | 1835.1 | 1718.1 | 1705.3 |
| 50° | 8534.9 | 7196.4 | 3105.2 | 2003.5 | 1989.3 | 2126.2 | 2063.5 | 1895.1 | 1735.2 | 1585.4 | 1572.6 |
| 52.5° | 9054.4 | 7456.1 | 2635.7 | 1803.7 | 1916.5 | 2117.7 | 2026.4 | 1840.8 | 1645.3 | 1488.4 | 1471.2 |
| 55° | 9495.3 | 7590.3 | 2183.3 | 1632.5 | 1810.9 | 2044.9 | 1982.1 | 1776.6 | 1518.3 | 1351.4 | 1337.1 |
| 57.5° | 9746.5 | 7481.8 | 1806.6 | 1464.1 | 1665.3 | 1925.0 | 1906.5 | 1639.6 | 1367.1 | 1238.6 | 1221.5 |
| 60° | 9638.0 | 7042.3 | 1498.4 | 1317.1 | 1526.9 | 1795.2 | 1775.2 | 1504.1 | 1251.5 | 1130.2 | 1113.1 |
| 62.5° | 9040.1 | 6204.6 | 1254.3 | 1188.7 | 1401.3 | 1662.5 | 1643.9 | 1399.9 | 1163.0 | 1046.0 | 1027.4 |
| 65° | 7835.7 | 5047.3 | 1064.5 | 1081.7 | 1274.3 | 1502.6 | 1529.8 | 1312.8 | 1093.1 | 978.9 | 960.4 |
| 67.5° | 5976.3 | 3656.0 | 916.1 | 988.9 | 1150.2 | 1345.7 | 1424.2 | 1250.1 | 1034.6 | 926.1 | 909.0 |
| 70° | 3406.3 | 2076.3 | 790.6 | 899.0 | 1040.3 | 1200.1 | 1342.8 | 1200.1 | 971.8 | 881.9 | 870.5 |
| 72.5° | 1291.4 | 953.2 | 683.5 | 809.1 | 934.7 | 1077.4 | 1252.9 | 1121.6 | 899.0 | 831.9 | 820.5 |
| 75° | 689.2 | 580.8 | 575.1 | 703.5 | 813.4 | 957.5 | 1140.2 | 1044.6 | 844.8 | 879.0 | 907.6 |
| 77.5° | 469.5 | 411.0 | 480.9 | 602.2 | 680.7 | 824.8 | 1020.3 | 927.6 | 732.1 | 729.2 | 672.1 |
| 80° | 325.4 | 291.1 | 391.0 | 485.2 | 526.6 | 693.5 | 890.5 | 796.3 | 596.5 | 556.5 | 532.3 |
| 82.5° | 195.5 | 189.8 | 292.5 | 362.5 | 372.4 | 535.1 | 737.8 | 667.8 | 488.0 | 425.2 | 428.1 |
| 85° | 107.0 | 112.7 | 186.9 | 212.6 | 216.9 | 373.9 | 577.9 | 516.6 | 375.3 | 315.4 | 318.2 |
| 87.5° | 30.0 | 38.5 | 68.5 | 84.2 | 104.2 | 194.1 | 343.9 | 306.8 | 188.4 | 131.3 | 131.3 |
| 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)