

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: P232739

Luminaire Tested: **CST-10-4-D-U-T5-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P232739
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-171-21)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-10-4-D-U-T5-7030
Description: CELESTEON HIGH MAST LUMINAIRE
(10) 70 CRI, 3000K LEDS AND TYPE V OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42666 lumens
Efficiency: N/A
Efficacy: 138.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B5 - U0 - G5

Input Watts (W): 308
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

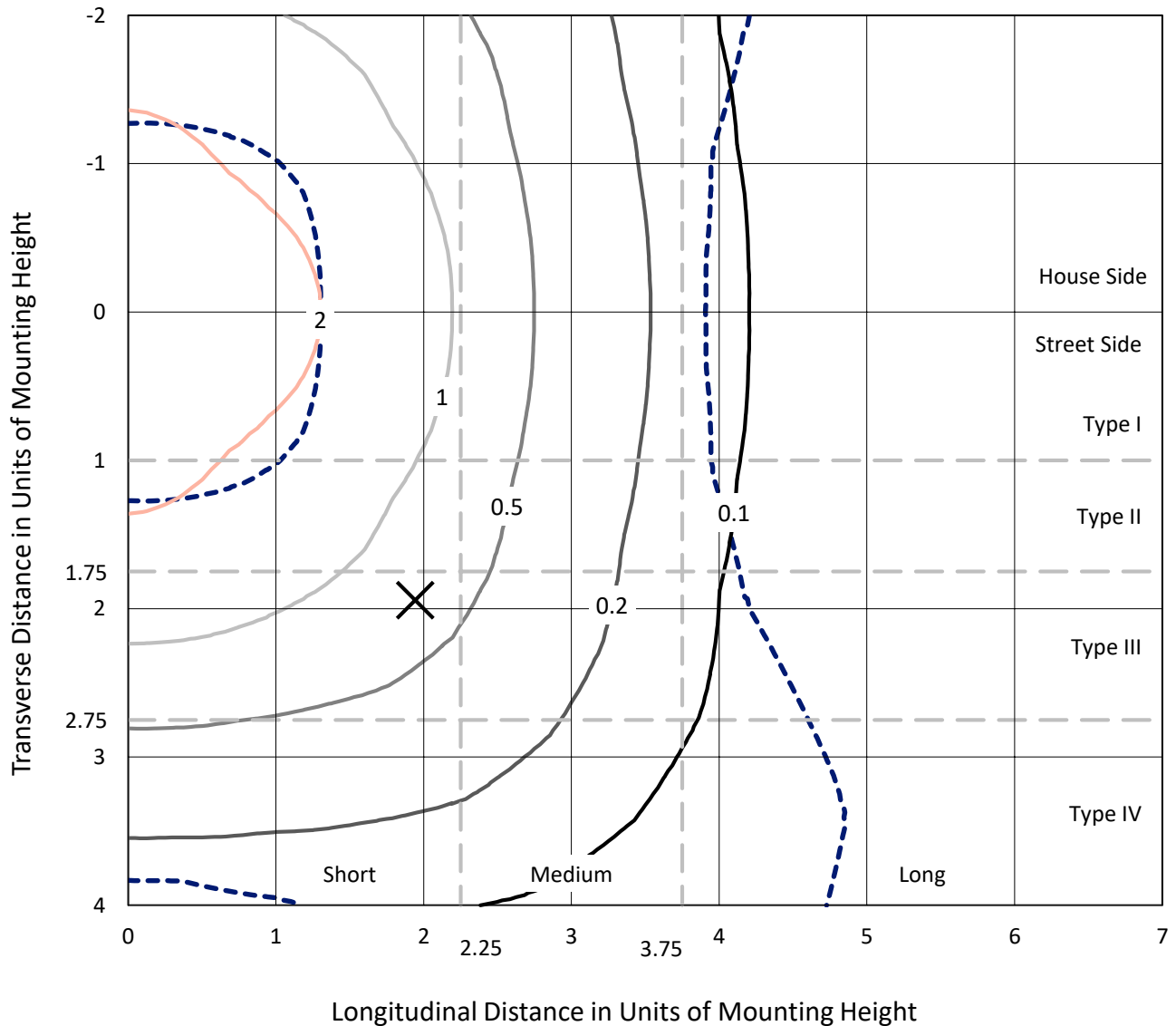


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

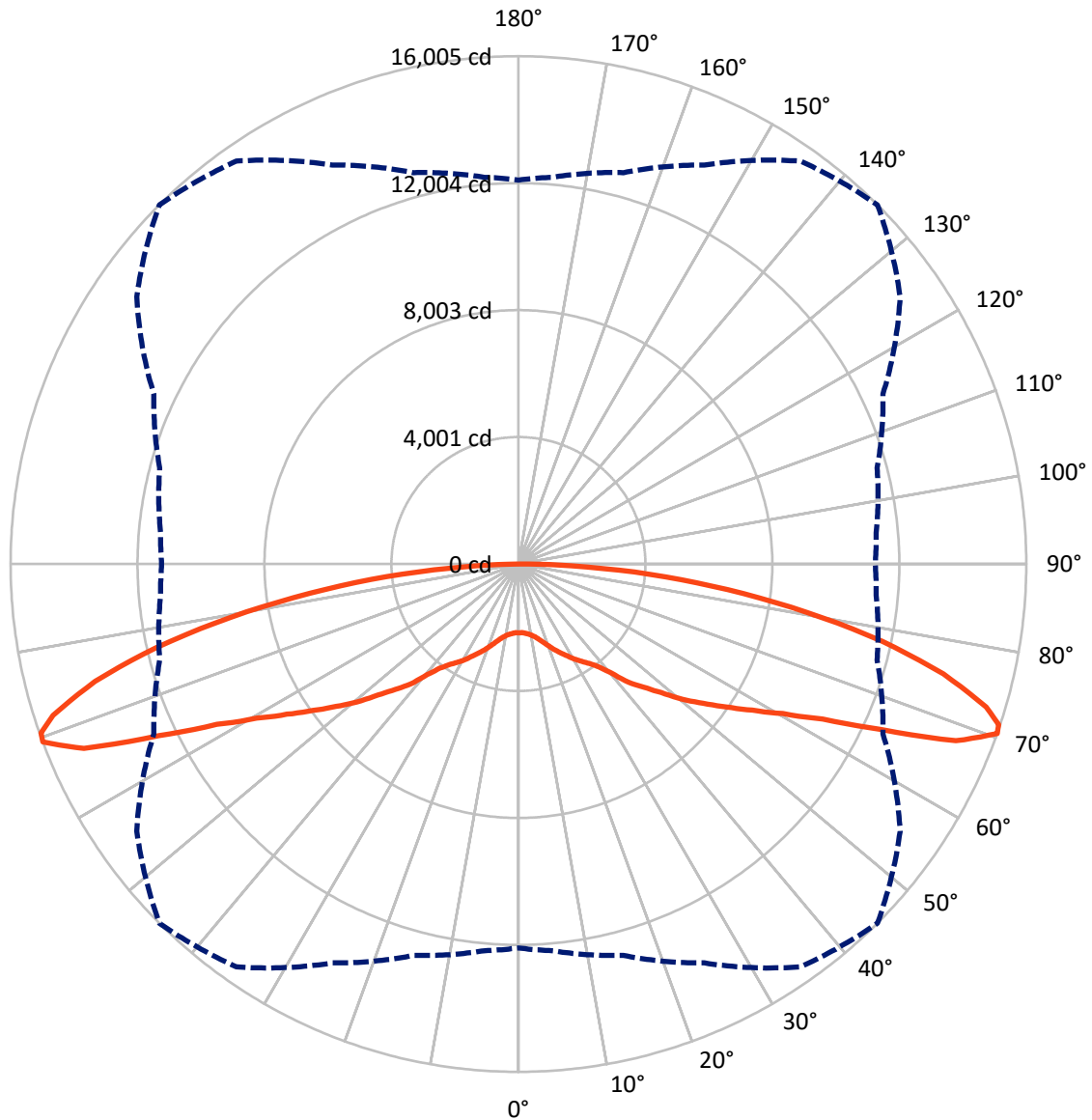


Based on 30 foot mounting height. Maximum calculated value = 2.6 fc
 Type V - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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



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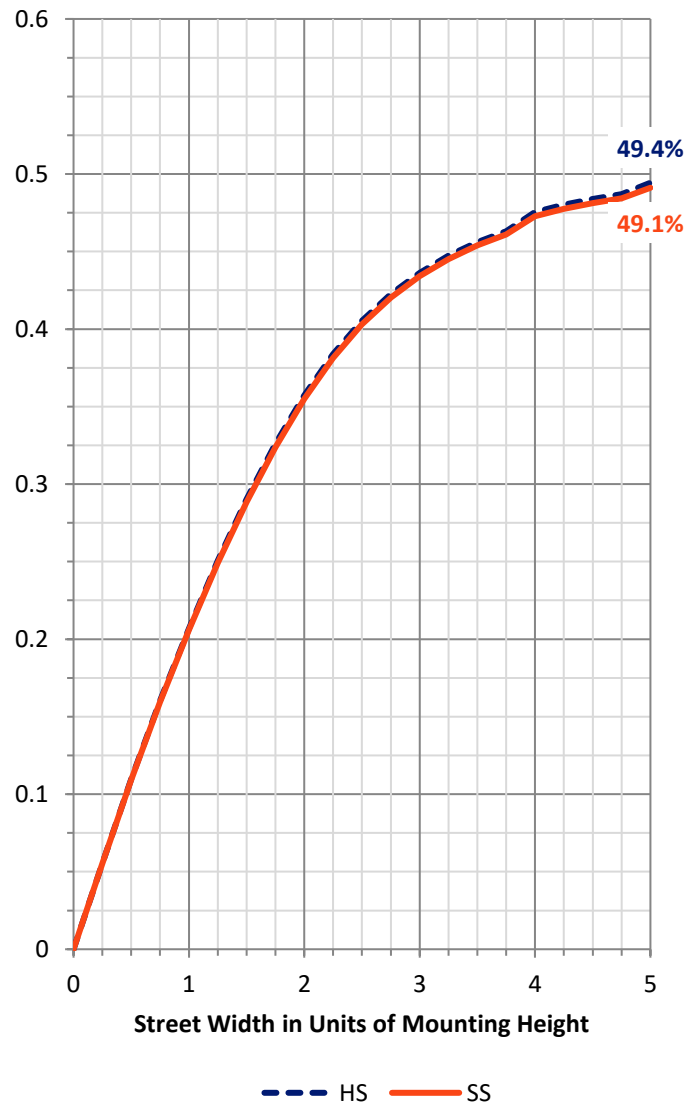
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 21333.0 | 0.0 | 21333.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 21333.0 | 0.0 | 21333.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 42666.0 | 0.0 | 42666.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 212.6 | 0.5 |
| 10°-20° | 707.5 | 1.7 |
| 20°-30° | 1413.8 | 3.3 |
| 30°-40° | 2431.3 | 5.7 |
| 40°-50° | 4497.7 | 10.5 |
| 50°-60° | 7644.8 | 17.9 |
| 60°-70° | 12322.5 | 28.9 |
| 70°-80° | 10891.0 | 25.5 |
| 80°-90° | 2544.8 | 6.0 |
| 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° | 42666.0 | 100.0 |
| 0°-180° | 42666.0 | 100.0 |



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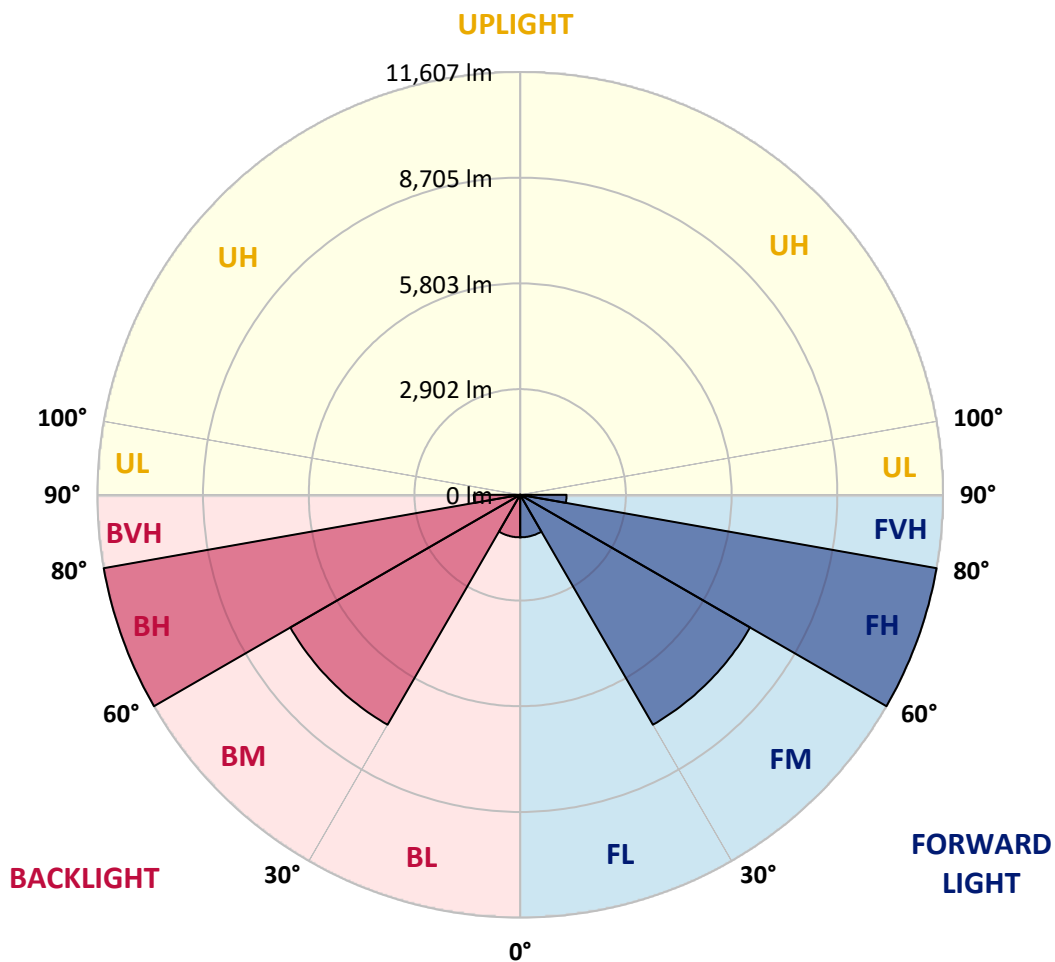
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 1166.9 | 2.7 | | | |
| FM | (30°-60°) | 7286.9 | 17.1 | | | |
| FH | (60°-80°) | 11606.8 | 27.2 | | | G4/12000 |
| FVH | (80°-90°) | 1272.4 | 3.0 | | | G5 |
| BL | (0°-30°) | 1166.9 | 2.7 | B3/2500 | | |
| BM | (30°-60°) | 7286.9 | 17.1 | B4/8500 | | |
| BH | (60°-80°) | 11606.8 | 27.2 | B5 | | G4/12000 |
| BVH | (80°-90°) | 1272.4 | 3.0 | | | 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° | 2167.8 | 2167.8 | 2167.8 | 2167.8 | 2167.8 | 2167.8 | 2167.8 | 2167.8 | 2167.8 | 2167.8 | 2167.8 |
| 2.5° | 2186.5 | 2182.5 | 2183.9 | 2183.9 | 2159.7 | 2165.1 | 2166.4 | 2181.2 | 2181.2 | 2187.9 | 2189.2 |
| 5° | 2208.0 | 2201.3 | 2202.7 | 2208.0 | 2185.2 | 2189.2 | 2189.2 | 2204.0 | 2201.3 | 2209.4 | 2213.4 |
| 7.5° | 2245.6 | 2240.2 | 2240.2 | 2245.6 | 2218.8 | 2225.5 | 2221.4 | 2234.9 | 2229.5 | 2233.5 | 2241.6 |
| 10° | 2306.0 | 2304.7 | 2300.6 | 2303.3 | 2273.8 | 2277.8 | 2269.8 | 2284.5 | 2273.8 | 2275.1 | 2289.9 |
| 12.5° | 2375.8 | 2374.5 | 2374.5 | 2378.5 | 2353.0 | 2359.7 | 2346.3 | 2351.6 | 2332.9 | 2335.5 | 2347.6 |
| 15° | 2461.7 | 2464.4 | 2467.1 | 2479.2 | 2463.1 | 2469.8 | 2449.6 | 2446.9 | 2425.5 | 2425.5 | 2440.2 |
| 17.5° | 2579.8 | 2579.8 | 2581.2 | 2608.0 | 2598.6 | 2609.4 | 2581.2 | 2562.4 | 2540.9 | 2543.6 | 2546.3 |
| 20° | 2727.5 | 2722.1 | 2724.8 | 2757.0 | 2759.7 | 2767.7 | 2723.5 | 2698.0 | 2675.1 | 2676.5 | 2673.8 |
| 22.5° | 2884.5 | 2873.8 | 2872.4 | 2916.7 | 2935.5 | 2938.2 | 2876.5 | 2852.3 | 2822.8 | 2826.8 | 2824.1 |
| 25° | 3034.9 | 3024.1 | 3018.8 | 3055.0 | 3104.7 | 3102.0 | 3034.9 | 3000.0 | 2986.5 | 2986.5 | 2989.2 |
| 27.5° | 3183.9 | 3170.4 | 3165.1 | 3186.5 | 3264.4 | 3277.8 | 3189.2 | 3158.3 | 3144.9 | 3157.0 | 3162.4 |
| 30° | 3334.2 | 3323.4 | 3320.8 | 3327.5 | 3416.1 | 3475.1 | 3338.2 | 3324.8 | 3323.4 | 3334.2 | 3346.3 |
| 32.5° | 3516.7 | 3515.4 | 3504.7 | 3503.3 | 3569.1 | 3655.0 | 3516.7 | 3524.8 | 3546.3 | 3570.4 | 3586.5 |
| 35° | 3751.6 | 3748.9 | 3719.4 | 3732.8 | 3765.1 | 3845.6 | 3766.4 | 3771.8 | 3829.5 | 3865.7 | 3885.9 |
| 37.5° | 4064.4 | 4044.2 | 4006.7 | 4008.0 | 4024.1 | 4106.0 | 4075.1 | 4116.7 | 4221.4 | 4288.5 | 4281.8 |
| 40° | 4507.3 | 4475.1 | 4418.7 | 4402.6 | 4399.9 | 4516.7 | 4546.2 | 4640.2 | 4805.3 | 4904.6 | 4897.9 |
| 42.5° | 5140.9 | 5107.3 | 5021.4 | 4998.6 | 5008.0 | 5099.3 | 5185.2 | 5334.2 | 5477.8 | 5593.2 | 5586.5 |
| 45° | 5790.5 | 5747.6 | 5609.3 | 5531.5 | 5464.4 | 5534.2 | 5668.4 | 5901.9 | 6073.7 | 6225.4 | 6222.7 |
| 47.5° | 6542.2 | 6475.1 | 6308.6 | 6159.6 | 6025.4 | 6050.9 | 6194.5 | 6461.7 | 6669.7 | 6821.4 | 6812.0 |
| 50° | 7358.3 | 7291.2 | 7108.6 | 6884.5 | 6676.4 | 6693.9 | 6763.7 | 7045.5 | 7252.3 | 7399.9 | 7402.6 |
| 52.5° | 8230.8 | 8182.4 | 7973.0 | 7676.4 | 7390.5 | 7292.5 | 7336.8 | 7597.2 | 7834.8 | 7974.4 | 7986.5 |
| 55° | 9171.7 | 9124.7 | 8904.6 | 8562.3 | 8170.4 | 7950.2 | 7948.9 | 8210.6 | 8450.9 | 8573.0 | 8591.8 |
| 57.5° | 10115.3 | 10089.8 | 9896.5 | 9523.4 | 9029.4 | 8692.5 | 8616.0 | 8888.5 | 9158.3 | 9284.4 | 9309.9 |
| 60° | 11087.1 | 11052.2 | 10891.1 | 10578.4 | 10036.1 | 9574.4 | 9445.5 | 9718.0 | 10022.7 | 10152.9 | 10169.0 |
| 62.5° | 12187.8 | 12152.9 | 12029.4 | 11699.2 | 11299.2 | 10765.0 | 10578.4 | 10829.4 | 11111.3 | 11319.3 | 11297.8 |
| 65° | 13288.4 | 13280.4 | 13332.7 | 13183.7 | 12877.7 | 12571.6 | 12203.9 | 12479.0 | 12687.1 | 12666.9 | 12660.2 |
| 67.5° | 13112.6 | 13163.6 | 13526.0 | 14042.8 | 14688.4 | 14870.9 | 14021.3 | 13250.8 | 12797.1 | 12534.1 | 12450.8 |
| 70° | 12100.5 | 12232.1 | 12769.0 | 13871.0 | 15499.1 | 16005.2 | 14684.4 | 12676.3 | 11701.9 | 11318.0 | 11244.1 |
| 71° | 11542.1 | 11645.5 | 12264.3 | 13610.6 | 15504.5 | 15960.9 | 14527.3 | 12244.1 | 11253.5 | 10727.4 | 10676.4 |
| 72.5° | 10454.9 | 10614.6 | 11297.8 | 12897.8 | 15033.4 | 15417.2 | 13842.8 | 11438.8 | 10401.2 | 9888.5 | 9860.3 |
| 75° | 8358.3 | 8406.6 | 9288.5 | 11105.9 | 13536.7 | 13841.4 | 12288.4 | 9926.0 | 8856.3 | 8505.9 | 8485.8 |
| 77.5° | 5899.3 | 5900.6 | 6746.2 | 8657.6 | 11222.7 | 11716.6 | 10642.8 | 8183.8 | 7103.3 | 6663.0 | 6565.0 |
| 80° | 3124.8 | 3252.3 | 4091.2 | 5950.3 | 8406.6 | 9220.0 | 8457.6 | 6187.8 | 4994.6 | 4351.6 | 4261.7 |
| 82.5° | 1424.1 | 1515.4 | 2059.0 | 3373.1 | 5528.8 | 6640.2 | 5802.6 | 4017.4 | 2676.5 | 1982.5 | 1924.8 |
| 85° | 553.0 | 566.4 | 849.7 | 1602.7 | 3091.2 | 4165.0 | 3378.5 | 1883.2 | 931.5 | 569.1 | 527.5 |
| 87.5° | 181.2 | 193.3 | 276.5 | 617.4 | 1315.4 | 1663.1 | 1306.0 | 566.4 | 181.2 | 112.8 | 108.7 |
| 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)