

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: McGRAW-EDISON

Report Number: P510453

Luminaire Tested: **CTN-CA10-210-760-U-T5N**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510453
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-13)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-210-760-U-T5N
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37076 lumens
Efficiency: N/A
Efficacy: 174.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

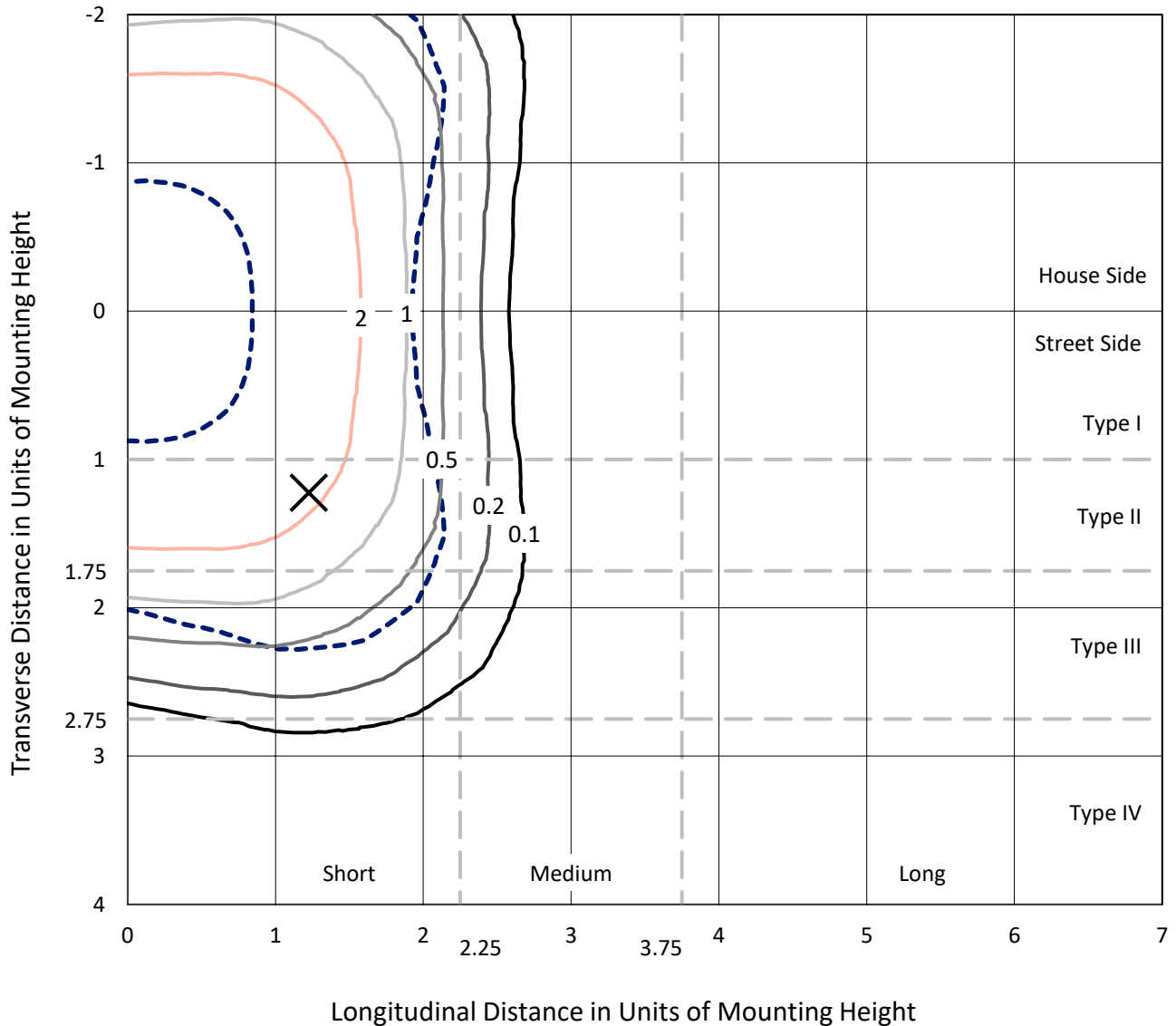
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

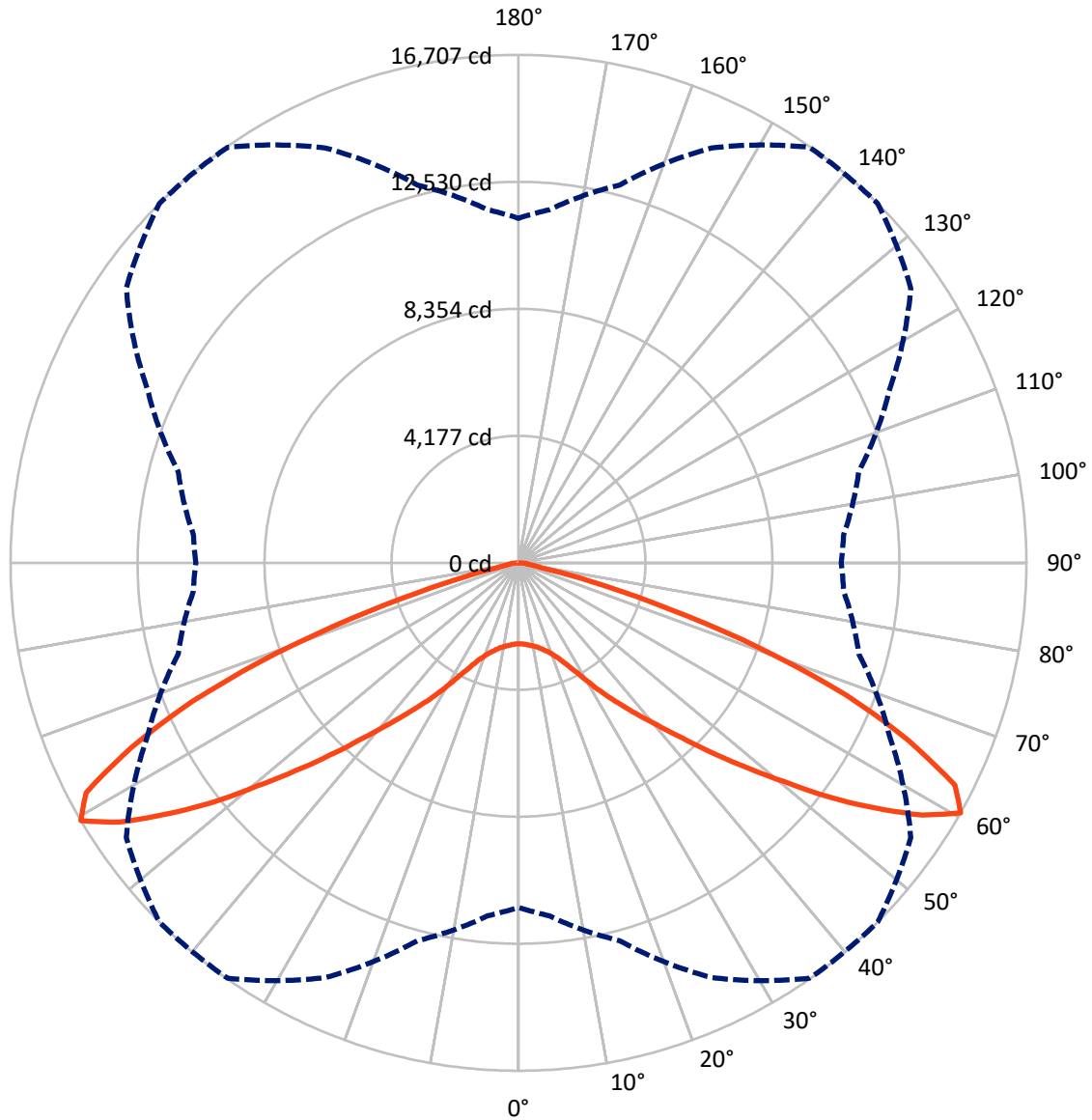
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.1 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

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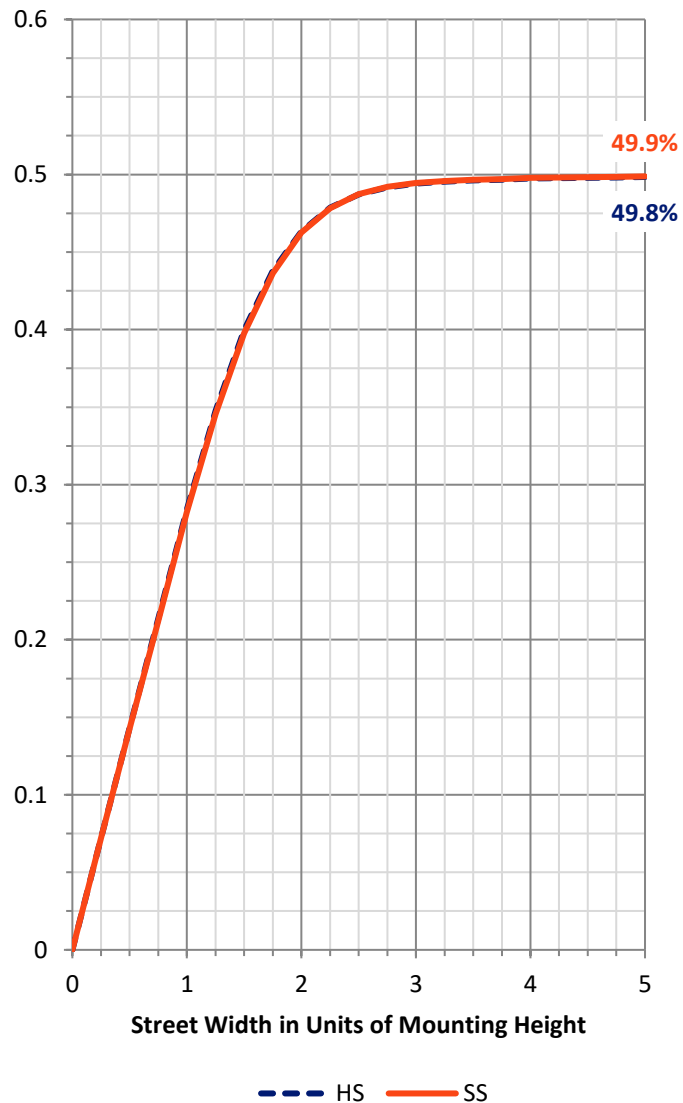
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 18538.0 | 0.0 | 18538.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 18538.0 | 0.0 | 18538.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 37076.0 | 0.0 | 37076.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 260.5 | 0.7 |
| 10°-20° | 849.3 | 2.3 |
| 20°-30° | 1803.9 | 4.9 |
| 30°-40° | 3825.0 | 10.3 |
| 40°-50° | 7274.0 | 19.6 |
| 50°-60° | 11539.8 | 31.1 |
| 60°-70° | 9754.2 | 26.3 |
| 70°-80° | 1604.7 | 4.3 |
| 80°-90° | 164.5 | 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° | 37076.0 | 100.0 |
| 0°-180° | 37076.0 | 100.0 |

Coefficient of Utilization



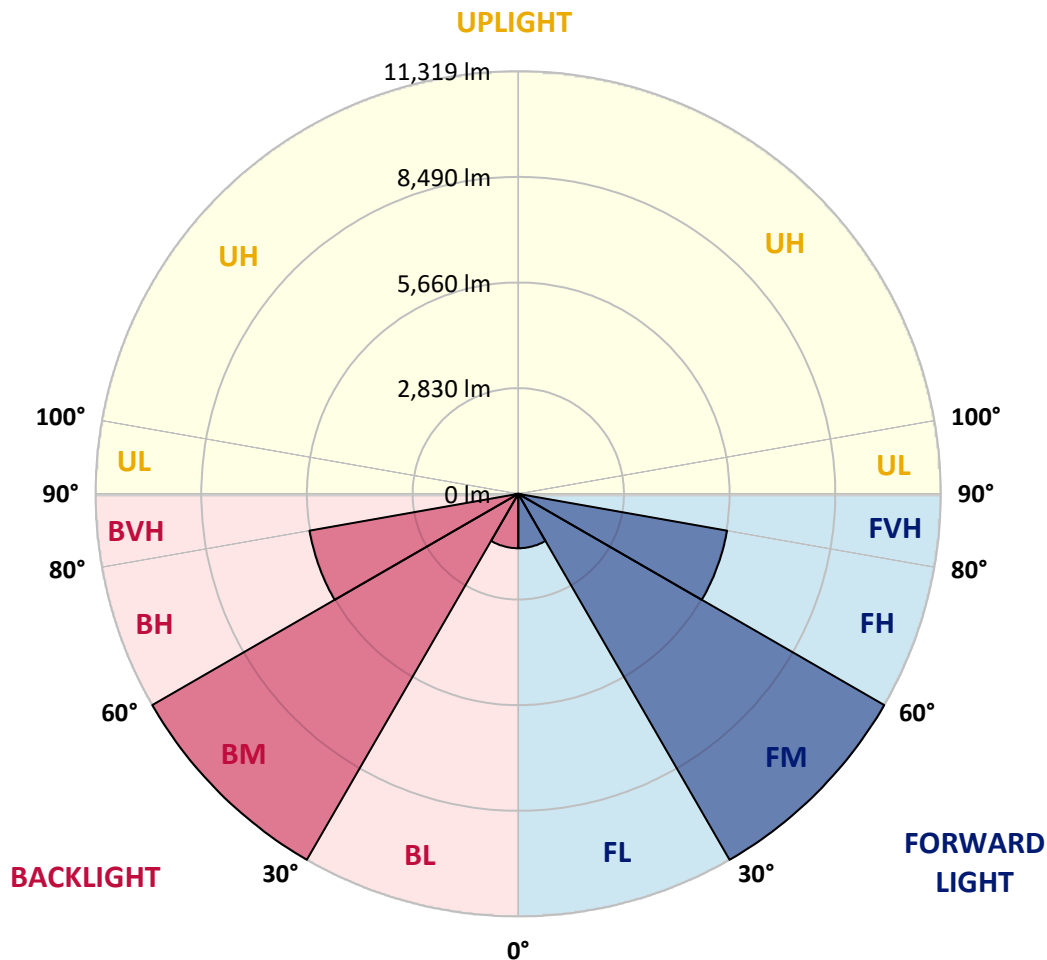
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1456.9 | 3.9 | | | |
| FM (30°-60°) | 11319.4 | 30.5 | | | |
| FH (60°-80°) | 5679.5 | 15.3 | | | G3/7500 |
| FVH (80°-90°) | 82.3 | 0.2 | | | G1/100 |
| BL (0°-30°) | 1456.9 | 3.9 | B3/2500 | | |
| BM (30°-60°) | 11319.4 | 30.5 | B5 | | |
| BH (60°-80°) | 5679.5 | 15.3 | B5 | | G3/7500 |
| BVH (80°-90°) | 82.3 | 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-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2661.9 | 2661.9 | 2661.9 | 2661.9 | 2661.9 | 2661.9 | 2661.9 | 2661.9 | 2661.9 | 2661.9 | 2661.9 |
| 2.5° | 2681.1 | 2674.5 | 2672.4 | 2669.6 | 2671.0 | 2671.7 | 2675.6 | 2675.9 | 2675.9 | 2679.4 | 2685.3 |
| 5° | 2711.2 | 2702.5 | 2699.3 | 2695.8 | 2697.6 | 2699.3 | 2702.8 | 2704.9 | 2704.6 | 2706.7 | 2711.9 |
| 7.5° | 2743.7 | 2740.5 | 2736.7 | 2734.6 | 2734.6 | 2739.5 | 2737.1 | 2740.9 | 2740.5 | 2743.0 | 2746.1 |
| 10° | 2791.9 | 2784.9 | 2784.6 | 2780.7 | 2782.5 | 2786.7 | 2787.4 | 2786.7 | 2787.4 | 2788.8 | 2796.1 |
| 12.5° | 2853.1 | 2851.3 | 2852.4 | 2849.2 | 2848.2 | 2852.7 | 2853.8 | 2858.3 | 2859.7 | 2863.9 | 2868.4 |
| 15° | 2951.6 | 2940.4 | 2939.0 | 2938.7 | 2940.8 | 2947.8 | 2949.9 | 2958.2 | 2962.1 | 2968.0 | 2978.2 |
| 17.5° | 3063.1 | 3066.9 | 3059.9 | 3059.2 | 3058.9 | 3064.5 | 3070.1 | 3088.6 | 3094.5 | 3108.1 | 3116.9 |
| 20° | 3240.9 | 3233.9 | 3229.7 | 3213.0 | 3208.8 | 3218.6 | 3238.8 | 3263.3 | 3274.8 | 3296.5 | 3312.9 |
| 22.5° | 3478.5 | 3466.7 | 3438.0 | 3418.1 | 3409.7 | 3426.5 | 3448.5 | 3487.6 | 3534.1 | 3561.0 | 3568.3 |
| 25° | 3822.0 | 3775.2 | 3739.6 | 3704.3 | 3691.7 | 3716.5 | 3752.1 | 3814.3 | 3872.7 | 3926.5 | 3951.3 |
| 27.5° | 4240.3 | 4210.6 | 4139.6 | 4084.1 | 4062.1 | 4083.0 | 4157.1 | 4244.8 | 4351.7 | 4407.7 | 4416.0 |
| 30° | 4771.4 | 4756.0 | 4665.5 | 4561.4 | 4522.3 | 4558.6 | 4646.0 | 4765.5 | 4914.3 | 5029.3 | 5049.6 |
| 32.5° | 5429.0 | 5351.1 | 5225.3 | 5106.2 | 5064.2 | 5108.6 | 5196.3 | 5367.9 | 5568.4 | 5695.6 | 5739.0 |
| 35° | 6183.1 | 6095.0 | 5906.0 | 5722.9 | 5668.7 | 5674.3 | 5814.8 | 6056.6 | 6330.9 | 6508.4 | 6557.0 |
| 37.5° | 7014.7 | 6924.9 | 6702.0 | 6417.9 | 6292.5 | 6301.9 | 6485.7 | 6800.2 | 7176.2 | 7369.7 | 7434.0 |
| 40° | 7902.3 | 7809.3 | 7579.4 | 7259.3 | 7053.2 | 7011.2 | 7256.9 | 7639.8 | 8021.8 | 8255.2 | 8280.0 |
| 42.5° | 8769.9 | 8659.8 | 8475.0 | 8154.9 | 7966.9 | 7854.4 | 8151.1 | 8498.0 | 8883.1 | 9093.5 | 9109.9 |
| 45° | 9544.9 | 9523.6 | 9375.1 | 9143.1 | 8988.3 | 8888.7 | 9100.4 | 9445.0 | 9714.0 | 9847.2 | 9895.7 |
| 47.5° | 10294.1 | 10280.8 | 10233.3 | 10152.2 | 10190.7 | 10025.0 | 10126.7 | 10282.9 | 10430.7 | 10528.5 | 10566.3 |
| 50° | 10950.7 | 10964.6 | 11057.9 | 11196.0 | 11474.1 | 11306.4 | 11274.6 | 11106.5 | 11110.7 | 11118.4 | 11157.5 |
| 52.5° | 11493.0 | 11567.0 | 11801.9 | 12218.4 | 12819.0 | 12815.2 | 12334.0 | 11890.3 | 11689.7 | 11600.6 | 11608.6 |
| 55° | 11965.7 | 12092.6 | 12480.4 | 13340.4 | 14200.0 | 14242.9 | 13588.5 | 12605.5 | 12229.6 | 12039.5 | 12064.3 |
| 57.5° | 12226.8 | 12420.0 | 13076.6 | 14382.0 | 15607.1 | 15658.8 | 14929.9 | 13397.7 | 12536.7 | 12055.5 | 12076.2 |
| 60° | 11330.8 | 11656.1 | 12866.6 | 15054.0 | 16683.3 | 16707.1 | 15750.0 | 13459.9 | 11587.0 | 10735.4 | 10610.7 |
| 62.5° | 9272.4 | 9723.1 | 11430.8 | 14533.3 | 16184.7 | 16111.0 | 15236.7 | 12294.5 | 9518.4 | 8485.5 | 8380.6 |
| 65° | 6965.1 | 7389.0 | 9177.0 | 12444.1 | 14201.0 | 14103.9 | 13213.5 | 9716.8 | 6978.4 | 5881.9 | 5752.9 |
| 67.5° | 3769.6 | 4409.8 | 6082.8 | 9505.8 | 11320.7 | 11650.2 | 10416.7 | 6772.6 | 4061.0 | 2944.3 | 2831.0 |
| 70° | 1302.0 | 1682.5 | 3101.5 | 5967.1 | 8165.4 | 8495.9 | 7103.5 | 3632.3 | 1777.2 | 1111.2 | 997.6 |
| 72.5° | 462.3 | 532.9 | 1166.0 | 2881.7 | 4648.8 | 5150.9 | 3832.9 | 1460.9 | 566.4 | 412.7 | 404.3 |
| 75° | 326.4 | 336.8 | 414.4 | 939.6 | 2012.7 | 2465.2 | 1511.3 | 485.0 | 353.3 | 330.2 | 328.1 |
| 77.5° | 291.4 | 297.4 | 335.8 | 382.6 | 615.0 | 787.3 | 465.1 | 351.9 | 306.8 | 293.9 | 289.3 |
| 80° | 277.1 | 281.6 | 292.8 | 313.8 | 348.7 | 362.7 | 313.8 | 300.9 | 279.2 | 273.6 | 271.9 |
| 82.5° | 242.2 | 241.1 | 244.2 | 253.0 | 268.7 | 272.2 | 251.9 | 235.9 | 236.2 | 229.6 | 226.4 |
| 85° | 163.9 | 173.7 | 166.3 | 157.2 | 195.0 | 196.0 | 182.7 | 137.0 | 155.5 | 152.3 | 139.4 |
| 87.5° | 49.6 | 55.9 | 44.4 | 30.7 | 42.3 | 32.8 | 29.7 | 30.7 | 29.4 | 25.5 | 23.1 |
| 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)